THE POTENTIAL FOR AN EU SUPRACAPITALISM

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Abstract

This research set out to establish whether the supranational management by the European Central Bank (ECB) of the monetary policy and exchange rate policy of the 12 European Union (EU) member states adopting the euro single currency, could be considered as a precursor to the development of a one-size-fits-all model of EU capitalism. In doing so, eight typologies of EU national capitalisms were constructed from the broad range of literature of types or varieties of capitalism, and were employed to test the performance of their economies between 1986 and 2006. Using a broad range of macroeconomic variable indicators over a period that began with Single European Act (SEA) and coursed through seven years past the launch of the euro in 1999, levels of influence of the ECB and euro as institutions on the performance of the selected capitalism groups were measured in order to establish the extent to which the ECB as a genuine supranational body would be able to both complete the planned transmission to full EU economic and monetary union as a basis for future EU political union.

The findings suggest that although there is evidence of significant overall influence over most of the macroeconomic variable indicators of the selected typologies, it remains unclear whether such supranational influence will be enough to overcome the difficulties surrounding the more politically sensitive areas of taxation and unemployment. And, until the effective supranational management of these variables, which would ultimately encompass levels of supranational influence over fiscal policy and tax harmonisation, the current level of ECB supranational power will remain as it is for the foreseeable future.

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Introduction

Origins and background

The notion and concept of a European 'supracapitalism' originate in two aspects of international political economy: the asymmetric distributive patterns of wealth[1], and the national politico-economic systems that manage the generation, aggregation, and deployment of wealth. In particular, the original focus rested on how differing politico-economic systems reconcile the generation of wealth with attempting to achieve optimal levels of welfare for their populations; effectively, the nexus between the creation and distribution of wealth and the politico-economic systems nation-states choose to adopt within any given timeframe. And, while these constructs can be largely typified by levels of direct government involvement in the economy and the property rights of individuals, they are also increasingly influenced by, and in some part related to, international and transnational institutions and structures such as the Organisation for Economic Co-operation and Development (OECD); the International Monetary Fund (IMF); and the World Trade Organisation (WTO). And, with emergence of the European Union (EU) as an experiment in regional political and economic integration, where a number of individual politico-economic systems, or national capitalisms, are both interconnected and interdependent at various levels, offered itself as both a relevant and timely opportunity to explore the capitalist system in a clearly defined and delimited international political economy laboratory. In particular, the question is, given the long history of capitalism's recurring and sometimes extraordinary failures of different manifestations of its form, together with the episodic mass privations and widespread financial chaos it brings, is it possible that the bringing together of the 12 national capitalisms that constitute the Eurosphere under the supranational management of the European Central Bank (ECB), may be a way to harness capitalism's productive benefits without many being subject to its injurious side effects, and thereby remedy the escalating gap between the EU's rich and poor?

With this in mind, the following introductory passages consider the above-mentioned aspects of international political economy, and bring them together by introducing the concept of a

[1]The World Bank reported in 2008 that, in 2005, almost half the world's population - over three billion people - live on less than $2.50 a day', and '80% of humanity lives on less than $10 a day'. (World Bank Development Indicators, 2008)

supranationally-directed form of EU politico-economic system, or supracapitalism, as one of the potential trajectories for the 'European Experiment'.

Capitalism and asymmetric distributive patterns of wealth

Although the terms wealth, capital, and capitalism are often used synonymously they do describe different characteristics of modern politico-economic activity. The accumulation of wealth is not in and of itself capitalism, the materially rich have always been with us, but before capitalism they were wealthy precisely because they were religiously, militarily, or politically powerful. Before capitalism, wealth was inextricably tied to the prevailing social structure. Neither is the use of capital capitalism; money, machinery, and other productive assets have been around a very long time, as have trade, markets, and financial transactions. Capitalism refers to the particular organisation of society whereby capital becomes the driving force of society, especially in the types of laws and institutions that frame that society. However, it is these legal and institutional frameworks that determine the distribution of the wealth that nation-states produce, and ultimately therefore, their citizens' welfare. In this way the accumulation of wealth is both the rationale for, and the desired output, of capitalism as a form of socio-economic organisation. The problem is that this output is invariably unevenly distributed.

A necessary prerequisite for any consideration of the uneven distributive patterns of wealth is to initially examine wealth's nature and characteristics, which are essentially determined by considering how wealth is measured, but where the publication, distribution, and analysis of financial and monetary assets are usually conflated with a country's aggregated productive assets, or real wealth. This means that the nature of real wealth is often obfuscated by its representational features, largely because wealth is usually framed in monetary or financial asset terms. However, money and financial assets[2] are effectively the metrics by which wealth's scale and volumes are expressed and represented for comparative purposes; with the possession of financial assets arising from the desire to postpone consumption in order that money may be saved for future investment or speculation, or for precautionary reasons.

The nature of real wealth lies in the goods, services, and products people wish to consume (*The Economist*, 2009), the material capital formations of factories, machinery, and infrastructures; or the intangible constructs such as an educated workforce or well-

[2] The nature, and alternative forms of the functions of money are discussed in more detail in Chapter 6

functioning legal system, that offer the ability and amenities to enable individuals and organisations to produce more such goods, services, and products in the future. Expressed in the broadest sense these can be seen as a country's productive assets; whereas financial assets and their prices, as represented by money, are but a claim on real wealth, but not wealth in and of itself (See Figure 22 on page 204). If these claims multiply, or rise (or fall), it does not mean that aggregate wealth has increased. Should we slice a cake into eight pieces instead of four, it does not mean we have more cake to eat. Moreover, if everyone wanting a slice of the cake is given tradable shares in it, and those share prices rise from £1.50 to £2.00 on the stock market, the cake will still not increase in size. And similarly, should the same index fall to £0.75, half its original value, we would not have any less cake to eat. In this sense, what we are expressing here is a kind of representational or virtual wealth.

However, the monetary values of virtual wealth as expressed in financial assets, and measured by their market prices, do rise and fall over time. For example, these assets may rise over time because they are linked to the goods, services, and products produced by companies and other organisations, and as the economy in which they operate grows, so do their revenues. And, if margins remain constant during any given timeframe, profits, as expressed in monetary terms will also rise, and cash flows to shareholders will increase, and *vice-versa*. Furthermore, these fluctuations are often obscured and distorted by the different phases of national, regional, and global business cycles, and also by the subjective vicissitudes of investors' moods, which can jointly and severally further cause the estimated monetary values of financial assets to be re-rated as a result of a rise in prices, or de-rated as their monetary values fall (*The Economist*, 2009). Nevertheless, individuals and governments in the developed world, and also increasingly some of the faster-developing, emerging economies such as those of Brazil and China, appear to remain strongly influenced by the movements in the values of the virtual wealth of companies and financial institutions as reported by national stock markets. The dynamics of these markets are considered as one of the key barometers of a nation's well-being, and often are seen as evidence upon which to form the basis of major policy decisions by governments and central bankers, even though this can lead to policy mistakes such as premature fiscal adjustments, or overly optimistic and lax monetary stances.

In this view, wealth has two main guises: that of the real, which is an aggregation of a nation's productive assets; and that of the virtual, which represents financial claims on the productive assets of both the home country, and any other national economy invested in. And

both, although in some ways closely related, are measured in very different ways, with virtual wealth represented by the various monetary and financial claims on real wealth, as reported by stock markets and other financial institutions; and real wealth being reflected by generally-accepted macroeconomic mensuration. However, the effective calibration of the real national wealth upon which virtual wealth is reflected appears to remain elusive, with economists and governments preferring to employ published Gross Domestic Product (GDP), Gross National Product (GNP), Net National Product (NNP), and Net National Income (NNI) figures, which are only measures of income, and not wealth itself. These national measurements, while offering both static and longitudinal comparative analytical utility, only represent the 'profit and loss' or 'income and expenditure' part of the national accounts, and therefore record only the values of flows of goods and services in and out of the country. Subsequently, even though these methods were designed only to be used as an indicator of economic production, and to aid policy-making by identifying those sectors of the economy that were expanding or slowing, they have come to be accepted as general indicators of the overall progress and performance of nation-states; and therefore the collective well-being of its citizens. For example, in 2006 the real GDP of the United States (US) was measured at 11.3 trillion dollars, whereas the amount of total wealth from which this income emanated was tenfold this figure at an estimated 112.3 trillion dollars[3]; with a *per capita* allocation figure that would amount to over 380 million dollars for each American citizen.

The problem here is that although economic growth, as measured by national income streams, is a major macroeconomic policy objective of governments the world over, it does not necessarily translate into improvements in the well-being of their citizens. Indeed, employment and income of individuals may well increase as a consequence of economic growth, but these are just possible outcomes and not automatic or forecastable consequences. A more comprehensive definition and measure of wealth which directly relates to the welfare and well-being of a country's population is required. Therefore, by additionally introducing natural capital to the primary structure for assessing real wealth, the total value of the admixture of a country's manufactured, human, and natural capital becomes the overall social worth of an economy's assets, and can measured by attributing monetary values to productive capital; human capital; knowledge; population; natural capital; health; time; and institutions; (Dasgupta and Mäler, 2000). This broader and more inclusive approach to national capital

[3]Using constant United States (US) dollars, as at 2000, GDP from the Bureau of Economic Analysis, US Department of Commerce (2007); and the total wealth figure from UNU-IHDP (2012).

and well-being through social worth distils into four measurable groupings of national assets: recognisable capital accounting assets, human capital assets, national institutional assets, and time assets. Recognisable capital accounting assets include manufactured capital, plant, and intangible assets such as patents and brand values – that relate to what national income accountants and international organisations speak of when referring to investment and accumulation of reproducible capital.

The measurement of the wealth of national economies thus becomes much more complex and complicated than simple macroeconomic indicators suggest. Complex because of the number of interacting, or correlating, components and types of capital assets; and complicated as the relationships within and between these levels are sometimes difficult to identify or understand. However, as alluded to above, there is an opportunity for the development of an analytical framework that aids the both the understanding and measurement of a country's real wealth by linking wealth, as the aggregated social worth of a national economy, to the on-going well-being of its citizens. Therefore, the relationship between a national economy's worth and its well-being will largely depend on maintaining its capital over time and the composition of its productive assets. In this view, the management of a national economy becomes a matter of optimising the ratio between manufactured, human, and natural capital. See Table1 below as an example.

Table1

A typology of the wealth distributions of France, Germany, and the United Kingdom (UK), 1996-2006

	1996			**2006**		
	Manufactured	**Human**	**Natural**	**Manufactured**	**Human**	**Natural**
France	23%	75%	2%	25%	74%	1%
Germany	26%	66%	8%	24%	69%	7%
UK	8%	90%	2%	10%	89%	1%

Source: adapted from Inclusive Wealth Report 2006

And, it is the broader notion of a more comprehensive real wealth measure of citizens' well-being that affords the opportunity to link this with the concept of Hicksian well-offness and a nation's capital maintenance by bringing together economic theories of income and well-offness and the accounting theory of capital maintenance. Therefore, the measurement of the material capital formations of factories, machinery, infrastructures, and the intangible constructs such as educated workforces and legal systems described above – a nation's productive assets that constitute its real wealth - would normally be located in a balance sheet of some kind.

Nevertheless, for nation-states although there is as yet no widely-recognised accounting measure of national stocks of natural, human, and physical assets, it is possible to assign monetary values to a number of key national assets such as physical capital relating to machinery, buildings, and infrastructure; human capital as in the population's education and skills; and natural capital in the form of land, forests, fossil fuels, and minerals. In the case of the 2006 US wealth figure above, physical or productive capital makes up 19 percent, human or social capital constitutes 75 percent, with natural resources capital accounting for the remaining 6 percent. The three EU examples of France, Germany, and the UK in Table 1 depict a similar story.

Both real (productive) and virtual (financial) representations of wealth imply levels of Hicksian well-offness[4], and they jointly and severally appear to play significant roles in steering government policy in relation to growth, the generally-accepted national metric of collective well-offness, as well as influencing those institutional agencies upon which governments look towards for guidance in their policy-making; such as the IMF, the OECD, and the World Bank. Given then that the measurement of wealth is central to such decision-making processes, and that actual and potential improvements in the well-being of nation-states, as expressed through growth in these existing benefits and potential future benefits, just how is wealth, or well-offness, shared or distributed within, and between, individual populations of nation-states?

The concept of national well-offness in relation to wealth aggregation provides an important linkage between the nature and characteristics of wealth described above, and the various allocative mechanisms that ultimately determine its generation and distribution. This

[4]The term well-offness was originally used by John Hicks (Hicks 1946), refined by Alexander (1962) for application by firms, and developed as the capital maintenance concept by Hendrickson (1977).

relationship can be seen by examining the interdependent notions of income, consumption, and capital maintenance, where, adapting Hicks (1946), shows us that real income[5] is the maximum value that can be consumed during a given period in order to be as well off at the end of the period as at the beginning; where well-offness relates to the maintenance of capital in relation to positive and negative adjustments to income and consumption. In this way, a nation's wealth, or well-offness can be seen to fit with the generally-accepted macroeconomic formula for national income Y = C + G + I + (X-M); where 'Y' denotes national income, 'C' is consumption, 'G' illustrates government spending, 'I' shows the overall level of investment, and 'X-M' signifies the difference between exports (X) and imports (M).

The overall management of national economies can therefore be seen to involve the generation and distribution of wealth over and above capital maintenance levels in order to both maximise a country's well-offness, whilst also making adequate provision for the on-going welfare of its citizens. However, these considerations pose two further interrelated questions: how and why do different politico-economic systems vary in the way that they allocate resources to generate and share such wealth, and how did these systems evolve? And the answers to these questions appear to lay in the institutional structures, strategies, and operations of the prevailing systems of socio-economic organisation and management in place for a particular society at any given time, and where capitalism is now the dominant prevailing system.

National capitalisms and the distributive patterns of wealth

Capitalism can be seen as a decentralised system whereby governments can be seen to enjoy an 'arm's length' relationship with economic actors, and attempts to match resource inputs with material outputs, and largely bestows the co-ordination of the generation of inputs and the allocation of outputs to markets and individual actors; usually directly intervening only when markets are seen to be failing, or to have failed.[6] Under capitalism, wealth can be viewed as a consequence of nation-states and individuals attempting to match finite input variables, or resources, with output variables, or material wealth, the demand for which is unlimited. And, because demand is unlimited, and at any given time human populations are

[5]The original passage from Hicks (1946:172) is '...we ought to define a man's income as the maximum value which he can consume in a week, and expect to be as well off at the end of the week as he was at the beginning.'
[6]The extents to which governments distance themselves from these allocations, and the triggers and mechanisms for market interventions, is one of the key differentiating determinants of the types of capitalist systems nation-states favour.

relatively stable, unless every individual receives an equal share of generated material output or wealth, some will have more than others. Since every citizen must have access to some wealth in order to survive, whether it be by direct government welfare payments, subsistence farming, or the production and resale of goods, services, or intellectual property, it is here in the relationship between these finite and infinite variables that wealth can be seen to be created, distributed, and ultimately accumulated.

The idea of an EU supracapitalism arrives at a temporal juncture where capitalism has prevailed for over 400 years, and remains the world's dominant politico-economic system in the 21st century. However, capitalism is not one system, but rather a generic term which encapsulates several variants of economic organisation, reflecting the types of government influence as well as levels of direct government involvement, as the seven national 'value systems' of Hampden-Turner and Trompenaars (1993); Story's 'four models of capitalism'(1999); Esping-Andersen's *Three Worlds of Welfare Capitalism* (1990); and the 'Liberal Market Economies' and 'Co-ordinated Market Economies' of Hall and Soskice (2001) all demonstrate. What does appear to synthesise these, and other perspectives of the capitalist form, are its ever-present internal contradictions. Throughout the entire length of its evolution, the capitalist system of politico-economic organisation is typified by recurring episodic and systemic failures followed by metamorphoses into new 'life-forms' that, whilst retaining the core features of the preceding system, emerge in different configurations to again be the default choice of the majority of national governments, often only to subsequently fail again.

This continuing paradox of capitalism's regenerational transitions appears to suggest three things. One, with the exception of a diminishing number of centrally-planned economies, governments of most countries remain faithful to various guises of the capitalist system, regardless of its repeated failures; two, that the regenerated forms of capitalism must offer, or appear to offer, new solutions and remedies in the light of previous failures; and three, the mass publics that constitute the electorates of capitalist countries, seem to accept capitalism as the only available system that is capable of satisfying their wants and needs.

It appears then, at least for the foreseeable future, a future that Victor Lippit projects to last for another 500 years (Lippitt, 2005), that capitalism will remain the dominant politico-economic system, despite its internal contradictions and inconsistencies.

(See Table 2 below for a suggested outline of capitalism's evolution to date). Indeed, if there was a need to look for further support for this, the Bretton-Woods agreement of 1944, and the resultant post-1945 developments of capitalism, provides ample evidence. The key outcomes of the New Hampshire accord were intended to create a framework under which the potential for the ravages of unfettered capitalism, as witnessed by the seemingly collective inability by the governments of the day in the inter-war years (1919-1939) to effectively harness the positive outputs of capitalism whilst controlling for its very seriously damaging side-effects. The Bretton-Woods legacy set about to more formerly and rigorously engage governments in the running of both their individual economies, and also to engage more meaningfully in sharing responsibilities for the collective oversight and governance of international payments, and these developments ultimately gave rise to national capitalisms as units of politico-economic analysis.

The mainstream response to the Bretton-Woods agreement of 1944 set in train a new form of politico-economic organisation, whereby a new level of interconnectedness between the national capitalisms of the world economy was created by the elevation of the US dollar as the world's base currency, with the consequence that international exchange rates were also strongly linked to the dollar. Not only were national capitalisms now more responsible for the shared control and management of the international economic system as a whole, and more interconnected both with the US and with each other, but that also two generic models, or versions, of capitalism began to emerge: one based on the maximisation of shareholder wealth sometimes referred to as the Anglo-Saxon or Anglo-US model; and the other based on the maximisation of corporate wealth which would eventually be adopted by the Japanese and German-influenced economies. And, in the early 1950s the forerunner to the EU, the European Coal and Steel Community (ECSC) was born. The advent and early development of the EU from 1956 to the early 1980s is well documented, and is largely taken here as a given until the two most important events in its history unfolded: the creation of a single market, and the agreement on economic and monetary union.

Summary of the research setting

This thesis advances the concept of a supranationally-directed form of shared capitalism, or supracapitalism, as one of a number of trajectories the political economy of the EU may follow.

Table 2

An evolutionary schematic of capitalism's development

Type of capitalism	**Period**	**Main characteristics**
Pre-capitalism - Feudalism	Pre-17th century	The Feudal system
Agricultural capitalism – early, manual	17th century	In England, the emergence of genuine single market.
Agricultural capitalism – late, mechanised	18th century	Enclosure. Technological advances in agrarian machinery. Large numbers of disposed manual workers.
Bourgeois capitalism	18th century	Family owned firms. The Guilds. Protected industries.
Industrial capitalism	Mid-18th century	Industrial Revolution Significant technological developments. The agrarian 'disposed' form the workforce. New mass consumerism.
Mass production capitalism	1920s-1960s	Industrialisation as in the notion of Fordism.
Corporate capitalism	1945-present	Owners separate from the running of the firm. Professional managers employed. Larger and more diffused shareholder structure
National capitalisms as units of politico-economic analysis	1945-present day	Welfare state regimes. National output measurement and accounting: formalised and publicised. Anglo-US, French Statist, German Corporatist, Scandinavian Social Democratic, and Japanese typologies
EU capitalism	1999-2006	EU monetary and fiscal policy integration.

Source: primary

The arguments are set in the timeframe 1986 to 2006, which captures not only the ground-breaking accords of the Single European Act in 1986 (SEA) and the Treaty on EU in 1992 (TEU), as two of the main drivers of the 'European Experiment'; but also in 1999, the momentous realisation of the first stages of economic and monetary union (EMU) with the final establishment of the ECB as a legitimate supranational institution, together with the launch of the then emblematic EU single currency, the euro. That capitalism as an economic system has evolved into a publicly-visible transnational mechanism characterised by a network of individual, interconnected, and interdependent national capitalisms, is no more apparent than in the EU at this time. And, these developments can be seen as not only further reification of the EU's founding fathers' dream, but also may come to represent the next phase in capitalism's overall and continuing evolution.

Few commentators would dispute that the EU is unique. Fewer still perhaps, would contest that it is its political ambition and advanced economic integration that sets the EU apart from the other major regional collaborations of the world, such as the North American Free Trade Area (NAFTA) and the Asia-Pacific Economic Co-operation (APEC). However, until recently, the politicisation of the EU integration process has largely remained distant from its mass publics, where the planning process has entailed establishing a strong and broad economic platform from which to eventually deepen the political union alluded to at the signing of the Treaty Establishing the European Community (TEC) in Rome in 1957. Full economic *and* political union was clearly the EU's original telos, as illustrated in the preamble to the treaty where the founders made specific reference to a determination to bring '*ever closer union* among the peoples of Europe' (Church and Phinnemore, 2002:209) (emphasis added). That full economic and political union appears to remain the vision of some, if not all, of the EU decision-making élite has also recently been demonstrated by the drive to rush through agreement on an EU constitution. However, following referendums in France and the Netherlands on the constitution, the question of whether or not full political union is now an achievable or even realistic end, nearly 50 years on from Rome, will no doubt continue to receive considerable academic attention well into the future. What is clear is that the Treaty on European Union (TEU), agreed at Maastricht in 1993, was effectively to project the political elements alongside the economic features of the EU planning process fully into the public domain for the first time.

The Maastricht treaty has proved both immensely significant and highly controversial, not least because it portends intergovernmental, supranational and freestanding institutional

innovations (Church and Phinnemore, 2002). One of the major outcomes of these innovations was the establishment of provisions for EMU. Central to EMU was the creation of a monetary system comprising the European System of Central Banks (ESCB), the ECB as EMU's overseeing institution, and the euro as its single currency. Although the advent of the ECB in 1999 was to be the first major new supranational institution of the EU for forty years (Heisenberg and Richmond 2002), its birth, more significantly represented the creation of a new level, and type, of supranationality compared to that of the existing institutions.

Here, the *level* of supranationality is taken to reflect the degree to which different EU institutions control or influence decision-making on behalf of the member-states. This may be considered as a continuum whereby the complete supersession of national autonomy appears at one end of the scale; and full, existing national autonomy at the other. The notion of calibrating EU institutional supranationality develops from Philippe Schmitter's analysis of issue 'arenas' and levels of authority in Europe between 1950 and 2001. Five levels of institutional supranationality are considered: all policy decisions at national level; only some policy decisions at the then EC level; policy decisions at both national and EC level; most policy decisions at EC level; and all policy decisions at EC level (Schmitter 1997:403). The analysis charts the incremental rise of EU supranationality across 28 policy areas in four clusters or 'arenas' identified as economic, socio-cultural, politico-constitutional, and international relations and external security. The ECB represents a 'level five' economic supranationality, with *all* monetary and exchange rate policy decisions for the 12 euro countries being taken at the EU level. Moreover, EMU's fusing of economics and politics in this way reflected the EU's planned deepening of the integration process; and the consequent issuance of the euro currency promoted the notion of EU supranationality in a practical and physical sense, for the first time.

The concept of an ECB Eurosphere supracapitalism

The origins of the EU, those relating to the immediate post-Second World War European Economic Community (EEC) years, can be seen as political; or more accurately, geopolitical, in the sense that it spawned from the politics of geography, fear, and hope. This, in the light of the majority of subsequent commentary, debate, and literature,, regarding the EU's evolution, where the discourse has been largely shaped by the idea of maximum possible economic integration as a precursor for the eventual assimilation of members into full political union, may seem incongruous. And, although ideas of economic co-operation have

long been viewed as the most effective (possibly only) way to obviate war between nation-states, ironically the main catalyst for the beginnings of the EC was Adolf Hitler, although as Leonard points out 'none of the EC's leaders would readily admit to him being a founding father'. However, Hitler, 'like Charlemagne and Napoleon before him, brought together, by the sword, virtually the entire land area of the original EEC, destroying in the process the self-confidence of the nation-states from which it sprang' (Leonard, 2002:3). These states were soon recreated in 1945, but no longer viewed themselves definitive autonomous actors on the world stage. Fear of the Soviet Union, fear of a Germany ever being able to overrun Europe again, and hope brought about by US aid for Western Europe via the Marshall Plan, that effectively pulled, firstly the Netherlands, Belgium, and Luxembourg to form the Benelux Union, and then subsequently joined by France, Italy, and ultimately West Germany. In essence then, a ready-made geopolitical region had been created from within which increasing economic integration would be an organic process. From this, it may be posited that the first foundations had been laid from which to build the necessary institutional architecture for a future type of shared capitalism. This idea can also be seen to be a potential solution to prevent a repeat of the havoc wreaked upon countries around the world as result of their individual and collective inability to control the type of capitalism prevalent in the inter-war years, and which ultimately led to Germany (and Japan) mobilising for war in the first place. Therefore, with the notion of a pre-existing platform for future economic integration, and as the EU evolved through the establishment of the EEC and the European Community (EC), and moved inexorably towards EMU, it is possible to imagine the potential for the above-mentioned type of EU shared capitalism, or supracapitalism.

The term supracapitalism is used here as a hypothetical future form of EU capitalism. As one of a number of possible trajectories for EU capitalism, it is employed on the basis that if political union is to remain the telos for the EU movement, and if full economic integration is still considered by policy-makers as a precursor for such union, this will force changes on the structure and functions of EU capitalism in general, and EU national capitalisms in particular. This idea is grounded in the assumption that, in order to function, capitalism must essentially be a politico-economic system, and that national capitalisms are autonomous, nation-state operationalisations of capitalism, although often internationally interconnected and interrelated, are then effectively self-contained political economies, and therefore intensifying levels of politico-economic integration will increasingly erode aspects of national autonomy whist standardising and normalising national operationalisations of EU capitalism.

In this projection, full economic integration therefore is taken to mean that economic policy-setting, and the consequent macroeconomic management of all the member-states' national economies are centrally controlled at the supranational level, in the same way that the ECB has taken responsibility for monetary and exchange rate policy of the 12 members of the existing Eurosphere.

The concept of an EU supracapitalism is essentially based on a mutual operationalisation of capitalism by the 12 EU member-states that have adopted the euro, and as such are therefore at once inextricably conjoined with each other and are subject to supranational strategic planning, policy-making, and operational management of their financial, monetary, and exchange rate systems.

The main claims of the thesis

The continuing development of the supranational nature of EU institutions such as the ECB, and the external management of a group of national capitalisms such as within the EU, suggests that the EU policy-makers may have *already* set in train the movement towards supracapitalism. This logic flows from the options open to managers of national economies, where price stability via inflation control, low unemployment, sustainable economic growth, and movement towards balanced budgets are, and in this order of priority, their main economic objectives. In order to achieve these objectives, there are three policy instruments at their disposal[7]: monetary policy, fiscal policy, and exchange rate policy. The ECB now controls monetary and exchange rate policy for 12 national capitalisms, although with fiscal policy remaining a national concern, this represents one of, if not, the most difficult obstacles to achieving full EMU. This is due to both its highly sensitive political nature, and the projected timescale estimated to lay just the basic foundations of tax harmonisation across the Eurosphere spectrum.

The advent of the ECB, the creation of the Eurosphere, and the attendant Stability and Growth Pact (SGP) agreed at Amsterdam in 1997, offer a ready-made set of intra-EU comparisons to aid the advancement of the above claims. This experimental space offers a number of comparative opportunities. First, there is the Eurosphere collective of 12 member-states that have relinquished sovereign control of monetary and exchange rate policy to the

[7] This selection excludes a fourth policy option, that of prices and incomes control, which although still open to national governments, is associated with Keynesian-interventionist macroeconomic management, rather than the neoliberal, market mechanism-favoured by contemporary EU approaches.

supra level, three members of the EU that have remained outside the single currency system, and the ten new members that acceded in 2004. Second, as all twelve Eurosphere economies have retained control and management of fiscal policy, opportunities exist to consider how tax-raising policies and government spending decision-making differ between, and within, these collectives. This question is already very much in the political arena, with some member-states having struggled to remain within the SGP's constraints on government debt; and others, notably France, and Germany, from whose Bundesbank the model was originally derived, having chosen to disregard its limits altogether; the pact effectively remains in operational limbo. Third, there is also now the prospect for temporal comparisons, with the Eurosphere now nine years in the making, and the euro currency seven years old. Consideration of the temporal dimension allows analyses of when key decisions were made (time), the sequences of decisions (timing), and the speed (tempo) of developments.

It is against this backdrop of the political economy of the EU and the *de facto* and potential further developing supranational characteristics of the evolving EU polity, that the ECB emerges as genuine EU supranational monetary *and* economic institution, and that from the launch of the euro in 1999, is positioned to not only govern the monetary policy for and on behalf of the 12 individual national capitalisms that comprise the Eurosphere, but also to assume the overall supra-monetary and supra-macroeconomic management of these member-states, thereby creating a basis for the permanent foundations necessary to move towards the full economic and monetary bases set out as requisite for progress towards political union. The internal logic of the claims link together the ECB as a genuine existing EU supranational institution, the endogenous and non-neutral role of money in national capitalisms, and the heterodox theory of the monetary production system. If money can be held to be endogenous and non-neutral in national capitalisms, then the monetary production system, which is based on this centrality of money, together with the counter-neoclassical stance that demand creates supply, rather than the neoclassical Say's Law-based view that asserts the opposite; then the ECB's supra-management of the monetary aspects of 12 Eurosphere members states suggests that it may be possible to bring these 12 capitalisms into sharing a new and specific form of capitalism. Therefore, the supporting arguments which relate to the notion of an EU supracapitalism emanate from three assumptions.

The first of these is that the ECB is also a different *type* of supranational institution. It is a legitimate, authentic, and to date, the most clearly-defined supranational institution currently operational within the EU. The advent of the euro and the creation of the Eurosphere of

member-states adopting the currency, not only irrevocably established the ECB's central supranational power, but by doing so also immediately created two politico-economic combinations of national capitalisms within the EU: discrete monetary and economic spheres, with one comprising those of euro member-states; and the other, a collective sub-group of the non-euro EU member-states. Moreover, the ECB and the euro currency indirectly influences these key areas of non-euro members' politico-economic trajectories, as a result of the planned and developing politico-economic interdependencies within, and between, member-states, especially in intra-EU trade activity and the simplified structures of transaction costs and exchange rate stability. That the ECB and the Eurosphere can both be seen as genuine supranational EU institutions, the assumption then is that the ECB and the euro have *de facto* already begun the process of the transition towards an EU supracapitalism.

The eight analytical typological groupings of EU capitalisms advanced in this thesis (See Chapter 3) can be seen to transcend, and move beyond, the simple comparison between euro and ex-euro EU capitalisms, and the hitherto generally-accepted co-ordinated market economies and liberal market economies 'varieties' of national capitalisms. This thesis proposes an increased analytical scale and scope, whilst also controlling for contrasting national strategic objectives and trajectories of all the EU national capitalisms.

In sum, the main claims for the thesis, and the argument for the potential of an EU supracapitalism, are fivefold. One is that the EU's founding fathers' original idea behind achieving as higher level of economic integration as a foundation for eventual political union, has, via EMU, effectively created the opportunity for an EU supracapitalism with the establishment of the 12-member Eurosphere, supranationally-managed by the ECB. Two that one of the original objectives behind the drive for full economic and political integration of the EU was ultimately for the continuing improvement of its member-states citizens' well-being through a lessening asymmetric distribution of wealth, and that this may be achieved through a shared form of national capitalism co-ordinated by the ECB within the Eurosphere. Three, that in order for the ECB and Eurosphere to achieve this objective, an alternative approach to the understanding of how national capitalisms function by way of heterodox macroeconomic and monetary analyses is required to inform future policy-making. Four, is that the perception of progress towards EU integration to date, and the potential for an EU supracapitalism in the future, can best be understood from within a constructivist-institutionalism analytical framework. And, finally, by organising the existing national capitalisms of the EU into a typology constituting eight, contextually contingent groups, a 20-

year, pre and post-euro, quantitative-empirical measurement of the influence of the ECB, the euro, and the Eurosphere on all the EU national capitalisms, whether sharing the single currency or not, should be possible. The statistical tests conducted, and the longitudinal illustrations of macroeconomic trends and patterns shown, are intended to identify the degree of shift, if any, towards the levels of macroeconomic convergence that, in turn, might offer evidence of the ECB's direct and indirect influences moving the Eurosphere towards some form EU supracapitalism. Whilst making this particular claim, it is also important to do so with the caveat that the construct of any such selected typology, and the choice of statistical tests and time-series observations, can only ever be justified alongside a clear and critical statement of the limitations of those methods.

Summary of preliminary findings

The overview of the theoretical political economy findings in Chapter 5, appear to offer a fairly sound basis from which to proceed with the empirical testing suggested above. The politico-economic landscape *of* the EU, and the dynamics of the formations and constructs emerging *within* the political economy of the EU viewed through a constructivist-neoinstitutionalism lens, both point to opportunities for the development of a one-size-fits-all EU capitalism. There is initial support for this from Figure 16 where the dynamics of the majority (11) of the 15 capitalisms under scrutiny are positioned in both the top quadrants variously representing a propensity for regulated capitalism together with movement towards supranationality on both sides of the political spectrum, with Ireland significantly moving up towards the supranational spaces, away from its very clear historical nationalist position *vis-à-vis* the UK, probably to arrive at somewhere left of centre of the political spectrum. This effectively leaves the 12-3 split described above, where the two social democratic economies of Denmark and Sweden on the left, and the UK on the right are left to occupy the two lower quadrants. However, this dynamic changes radically with ten acceding capitalisms, all of who, unlike the previous enlargement groups, are pre-contracted to adopt the euro at some point in the short-to medium-term, and will do so with an array of politico-economic trajectories destined to populate all corners of the upper quadrants then diagram.

Whatever the eventual mapping of these dynamics reveals, two things are reasonable predictable: the regulated capitalism-neoliberal cleavage in illustrated in Figure 16, will be forced downwards to accommodate the more nationalist-oriented of the new members, as with, perhaps, Slovakia and Hungary; and the fluidity of positions will increase as national

governments change, and of course, as the new economies become stronger and thereby more influential in future EU decision-making processes.

With this in mind, the empirical results appear to generally support the argument regarding the post-euro influence of the ECB over some of the major macroeconomic variable indicators employed in this research. The strongest influence appears to centre on both measures of economic growth, price stability, direct government taxation, and social benefits. However, the overall influence on individual groups of capitalisms is noticeably more pronounced on the Southern European, the Former Eastern Bloc, and the Baltic Country economies than it is on the more mature national capitalisms grouped within the Co-ordinated Market Economies and the Liberal Market Economies typologies.

However, what is clear from the empirical evidence is that taxation patterns tend to be largely insulated from the effects of the euro, and that EU unemployment largely remains outside of the single currency's direct influence. And, it is the very politically sensitive nature of these two indicators that suggests that any future movements towards a more complete Eurosphere supracapitalism, one that is to feature elements of supranational fiscal management, may be some way off. And, in this, it may also be one of the constraints to, and limitations of, this work, in that a greater range of the scale and scope of the interrelationships between the macroeconomic variables alongside the limited within-and- between analyses of typologies of national capitalisms offered here, is required.

Structure of the following chapters

The next chapter (Chapter 1) critically explores the literature relating to EU integration and Europeanisation, and Chapter 2 follows the treatment of these literatures with a rationale and justification for adopting a constructivist-institutionalism approach to concept of an EU supracapitalism. Then, Chapter 3 is given over to the methodological justification of employing a bespoke typology of EU capitalisms as a framework for the unfolding empirical evidence presented in Chapter 4. Following this, the next section (Chapter5) then considers the 'ECB story' to date, its position as a key economic actor and major political influence, its current trajectory, its political and economic performativity, and how its management of the national capitalisms will need to change in line with the monetary production model if there is to be an EU supracapitalism. Chapter 6 builds on the above political science-international relations approach, and moves on to examine alternative understandings of the way in which national capitalisms function, the central role of money, and how these heterodox insights

suggest that EU policy issues are not necessarily technical, and in this sense directly relate to the constructivist-institutionalism approach outlined in Chapter 2. The summary then prescribes some changes to how the Eurosphere should be understood and managed in the future. The final chapter offers some a full summary of findings, individual conclusions from each of the findings, and some closing remarks.

Chapter 2 Varieties of Capitalism and European Integration literatures

Introduction

This chapter is primarily concerned with discussions and explanations surrounding EU national capitalisms, their progress towards full economic integration, the idea of 'Europeanisation', and the advancement of the concept of a Eurosphere supracapitalism with the ECB at its centre. Moreover, it is concerned with the development of a constructivist-institutional approach in order to both further the understanding of these developments, and also to allow a heterodox view of how national capitalisms in general, and EU capitalisms in particular, are organised and function. In turn, this alternative view of EU national capitalisms affords the opportunity to posit a normative perspective that can both challenge the ECB's current management of the Eurosphere and also signpost towards how an EU supracapitalism may evolve. However, before moving directly on to these aspects, there is a need to outline the main evolutionary features and salient characteristics of the capitalist system as they pertain to the above areas of discourse. And, in so doing there are opportunities to identify elements of the historical, sociological, and social influences that constitute the constructivist-institutionalism approach adopted in this work. Consequently the first following passages here begin with a definitional outline of capitalism and the capitalist system, and then trace what is essentially a set of social and historical accounts of the development of capitalism as a socio-economic system, and the subsequent advent of national capitalisms as politico-economic systems. For this, the work of Max Weber, Robert Cox, Ellen Meiksins-Wood, Victor Lippit, and Robert Collins offer important insights in these regards.

Any cursory, generic description or definition of capitalism, the kind that can be found in many of the mainstream dictionaries, would allude to it being an economic system where the production and distribution of goods and services depend on invested private resources and profit-making. Some accounts may go further and also introduce the concept of unfettered interaction between buyers and sellers as economic agents within market constructs. In essence then, capitalism refers to the particular organisation of society whereby capital becomes the driving force of society, especially in the types of laws and institutions that

frame that society. It may also be useful to add in to the mixture notions of ownership of resources, property relations, a free labour market the competitive imperative, and the exploitation of technological advances. However, all of these relatively simple illustrations belie the complexities, complications, and multiple interpretations of how capitalism as a politico-economic system may be, and has been, understood and operationalised at national levels.

We are also presented with an array of differing accounts that variously chart the advent and evolution of capitalism both in terms of space and time. And, although this thesis is primarily concerned with EU national capitalisms as the central units of analysis within a clearly-defined timeframe, overlooking capitalism's development and its various political adaptions would disallow any meaningful platform from which to build a theoretical framework against which the empirical evidence and other datasets can be tested. This is because EU national capitalisms have not only emerged from clearly very different historical departure points; for example, the UK and Greece, or Poland and The Netherlands, have progressed through widely contrasting socio-cultural interactions and influences, and have also been subject to sometimes diametrically-opposed politico-economic institutional architecture, of which the comparisons between Italy and Poland, or Finland and Ireland would be contrasting examples. Moreover, there is always the danger with any attempt to collectivise, or group, any number of national capitalisms, and especially EU national capitalisms, that boundaries that are broadly set may disallow any realistic meaningful comparative analysis, or move towards the point where 'n=1' and that parameters that are too finely calibrated will have the opposite effect and restrict potential analyses to the point where each capitalism will always appear very different to the point where n may equal 25. However, there are points along this imaginary continuum between n=1 and n=25, which do allow meaningful sub-groups of analyses of national capitalisms. For example, Esping-Anderson (1990) in *Three Worlds of Welfare Capitalism* based on how national economies resource the well-being of their citizens; Hampden-Turner and Trompenars (1994) *The Seven Cultures of Capitalism* that positions developing socio-cultural attitudes and values at the centre of analysis; and Story (2000) who expands on Johnson (1982), Henderson and Applebaum (1992), and Dicken (1992) to establish a matrix of alternative national politico-economic systems from which national capitalisms may be compared and contrasted.

However, the meaningful identification of different national capitalisms is not straightforward because it is contingent on what is actually meant by the term capitalism.

Robert Cox offers some early assistance here, where he expands the term to discuss 'capitalist development' as a 'process', and in doing so, advances a longitudinal continuum that begins in western Europe in the 14th century, and ends as 'coherent expansive force on a world scale' around the middle of the 19th century, which is described as then being in its 'competitive phase', and from which it entered into, 'from the late nineteenth century', a 'new, monopolistic phase' (Cox, 1987:51). And it is here that Cox also introduces the concept of the different phases of capitalism as being determined by separate evolving modes of social relations of production, a term which aligns with Lippit's Social Structures of Accumulation (SSAs) (Lippit, 2005), and Weber's ultimate, background, and intermediate social preconditions (see Figure I below); and where we can begin to link the development of capitalism to constructivism and institutionalism.

The problem with having a timeline of nearly 500 years, and with only three effective epochal turns, is that it offers little contextual insight into capitalism's development and the formation of national capitalisms as units of analysis. As Cox argues 'debates continue about when, during that long period from the fourteenth to the nineteenth centuries, capitalism actually became the dominant organizing force of economic life (Cox, 1987:51). These debates effectively centre on the essence of capitalism, and what is actually meant by the term. Those who consider capitalism in terms of exchange relations and the accumulation of economic capital through trade, tend to locate the origin of capitalism toward the beginning of the period; whereas as those who focus on capitalism as the organisation of production designed to generate the exponential expansion of capital, position its origin at the latter end of the era. And, of particular importance for this study, is that Cox also introduces the concept of capitalism in relation to the state with the suggestion of the 'emergence of a new form of state – the liberal state' which is to the fore as a 'critical factor in the breakthrough of capitalist development' (1987:52) in the later stages. And, in terms of the development of individual national capitalisms, Fernand Braudel in Cox (1996) goes further to emphasise that capitalism is not just a way of organising an economy.

> Capitalism, in each of its different historical forms, has also been a distinct system of values, pattern of consumption, social structure, and form of state. Each form has also projected a conception of world order. The new capitalism with its global vocation encompasses all of these things. So do alternative capitalisms, anchored in European and Japanese traditions. (1996:527)

In this way, both Cox and Braudel suggest that capitalism's historical development not only contains clear definitional epochs, or phases, but also importantly places the state in its various guises as interpreting capitalism in its own image; and thereby offering an early explanatory pre-cursor to the variations or 'varieties' of European national capitalisms discussed later in this chapter.

Cox's evolution narrative offers a longitudinal understanding of capitalism's development, and Meiksins-Wood (2002) who brings together a group of Marxist commentators, notably Maurice Dobb (1946), Robert Brenner (1977,1985), and Perry Anderson (1974,1980,1985), together with Immanuel Wallerstein (1974) in order to offer a framework that firmly positions capitalism in a spatial context,. This not only allows a definitional construct for capitalism in general, but also insights as to how capitalism has been subsequently adopted, and adapted, by various European nation-states in particular. If it is assumed that capitalism's origin can be placed in Europe, and for the moment to put aside any particular country where it may have spawned, it is possible to proffer a set of suitable parameters and developmental influences that may suggest direct and indirect linkages to modern-day EU capitalisms – both inside and outside the Eurosphere. Therefore, somewhere between the 1400s and the 1900s, or a juncture connecting the early characteristics of bureaucracy, exchange relations and trade to the European-driven worldwide expansion of capitalism, there must be point where all the components of capitalism as a complete politico-economic system came together, and from where it is also possible to consider the early influences on the formations and trajectories of individual of national capitalisms. And Meiksins-Wood is by far the most unequivocal, by setting this juncture in England, and in final third of the 17th century. At this time she argues came the culmination of 'a distinctive system of social property relations' that made both producers and appropriators 'irreducibly dependent on competitive production' Meiksins-Wood, 2002:94). More specifically, the components or 'laws of motion' of capitalism were established: the relentless compulsion to compete; to produce cost-effectively; to maximise profit; to reinvest surpluses; and systematically to increase labour productivity by improving the productive forces. And, she adds, with these compulsions came all the contradictions of capitalism. These contradictions were to become the recurrent internal inconsistencies which now are the traits of modern capitalism, which lead to the episodic and widespread damage and privations referred to earlier, and to which supracapitalism may be a remedy.

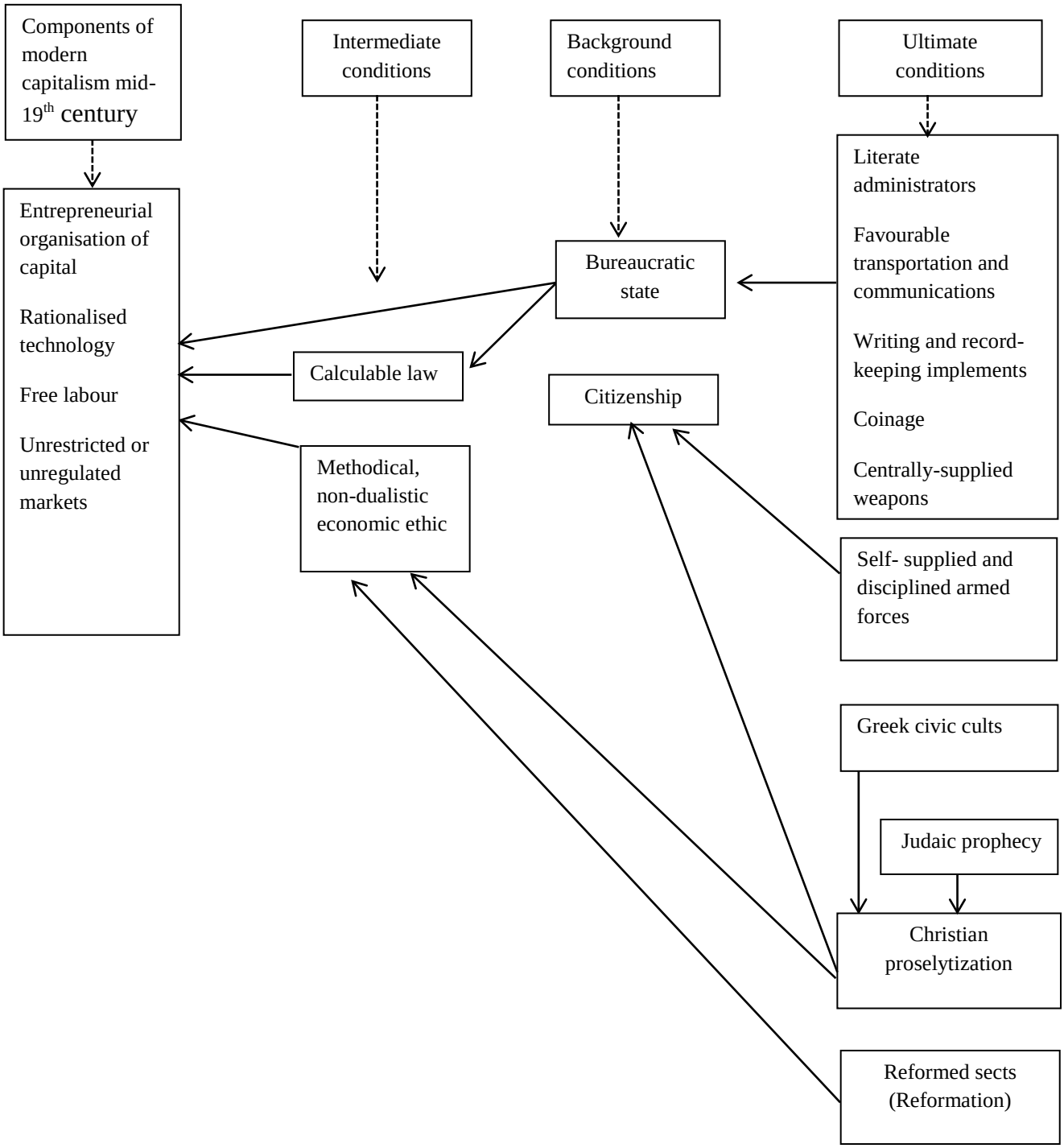
The components or the laws of motion capitalism, or, as Collins (1980:927) prefers, 'the components of a rationalised capitalism' can be seen to start from Weber's (1961:207)

definition ‘Capitalism, is the provision of needs by the method of enterprise, which is to say, by private businesses seeking profit, rather than forced contributions or traditionally fixed gifts or trade’. According to Collins, for Weber, capitalism is an ‘analytical concept’, and one that can be found as part of the historical development of many economies; some going ‘back as far as ancient Babylon’. And, capitalism became the indispensable form for the provision of everyday wants only in western Europe around the middle of the 19th century. In this way Weber viewed capitalism as being underpinned by rationality; the rational permanent enterprise characterised by rational capital accounting. Already, it can be seen that these ideas represent the early formations of national capitalisms as ‘rational’ units of analysis. In doing so, Weber (1961:207) links the ‘rational capitalistic establishment’ to calculations within ‘modern book-keeping’, and therefore calculability, which differentiates modern rational capitalism from its earlier partial forms, and makes it ‘methodical and predictable’(Collins, 1980), and in this way production and distribution within the capitalist system become both routinized and bureaucratised. From these ideas Weber builds a causal chain which can best be understood firstly by reference to an illustration that is constructed in a type of longitudinal flowchart form as in Figure 1 below.

By looking at this model from left to right, and starting with the core components of modern mid-19th century capitalism, Weber’s logic flows by first citing that there must be private appropriation of all the means of production, and their concentration under the control of entrepreneurs. Therefore, land, buildings, machinery, and materials must all be assembled under a common management in order that decision-making about acquisition, allocation, and deployment may be offer optimal efficiency. Moreover, all these factors of production should be on sale on the open market, be subject to property rights, and therefore represented by commercial instruments such as share ownership certificates on stock markets. It is seen that mechanisation is most significant for the organisation of large-scale capitalism (Collins, 1980:928). Second, labour must be free to move about in relation or response to conditions of demand, and that this should be a formal and legal freedom in line with workers deciding to sell their labour on the open market. And here, Weber notes that capitalism would be ‘impossible without a property-less stratum selling its services’ (Weber, 1961:209). This is because only this element completes a mass market for the factors of production by making it possible to calculate the cos of products in advance. Third, trading in markets must not be limited by irrational restrictions, for example non-economic constraints on the movement of goods and factors of production. And finally, there must be calculable law in legal

Figure 1

A politico-religious-economic linear-causal trajectory of capitalism



Source: adapted from Weber in Collins (1980) 'Weber's Last Theory of Capitalism: A Systemization' *American Sociological Review*, 45 (December) pp925-942

adjudication and public administration. Laws should be clearly understood and available to all, and in such a way as to ensure the enforcement of economic contracts and other rights are highly predictable. A legal system designed in this way forms part of the rational capitalism that Weber reinforces throughout. These include, the promotion and privileging of property rights over the factors of production; the smooth and accessible transferability of these rights through financial instruments and banking operations; the legal protection and, to a certain extent, regulation of markets; and the formal, legalised freedoms of workers.

What Collins and Weber do offer here is the opportunity to look backwards from the left-hand column in Figure 1, and to explore the religio-socio-historical causal chain leading up to the neo-classical view of capitalism offered in order to gain some insight as to how the many variations of EU national capitalisms may have come about, and perhaps more importantly for this work, to identify common threads that may bring them together in a structure of convergence towards a potential supracapitalism. Moreover, as a constructivist-institutionalism approach underpins this research, it is advantageous to have the opportunity to also view here the evolution of capitalism and EU national capitalisms through a social preconditions lens, which not only also affords the prospect of aligning this to the subsequent discussions on constructivist aspects of the ECB and EU supracapitalism in chapters below, but additionally to consider such social preconditions in conjunction with Lippit's SSAs also discussed below. Moreover, Weber's overall historic and social trajectory, also informs the historical and sociological neoinstitutional analytical variants advocated in this work

In sum then, Weber is really offering an early alternative constructivist take on the development of the institutional structures that feature in mainstream neoclassical thinking about capitalism, which is, of course, the very model of the *laissez-faire* capitalist economy that is challenged here by heterodox views as to how modern national capitalist economies actually function.

In the foregoing passages, Robert Collins's interpretation of Weber's social pre-conditions model offers the dual simultaneous benefits of a causal explanation of modern capitalism's evolution, together with a clear exposition of the way in which constructivism, in this case a version of social constructivism, may be applied to the development of capitalism in general, and national capitalisms in particular. Moreover, Weber's location of modern capitalism in the 19th century also aligns with Cox's third 'monopolistic stage' of capitalism. Cox, for his part, in addition to charting the three epochal phases of capitalism's journey, also advances

insights regarding the creation of the 'liberal state', and with it the early realisation of national capitalisms as separable units of analysis. Meiksins-Wood locates the origin of capitalism and 17th century England a template for a national capitalism. In doing so, she identifies the essential components of a national capitalism. However, while all these accounts build an overall picture as to the evolution of capitalism, what is missing is a link that explains how and why national capitalisms change over time. Victor Lippit's 2005 book, *Capitalism*, introduces the concept of SSAs. In identifying accumulation as the major underpinning force of national capitalisms, Lippit rationalises the differing forms of capitalism a nation-state may adopt as social conditions reshape at different identifiable temporal stages, and while doing so, provides two levels of institutional analysis: the narrow sense of institution such as a university or the IMF; and the broader sense which incorporates 'the habits, customs and expectations that prevail in a particular society' (Lippit, 2005:27). Although much of Lippit's narrative, and many of his illustrative examples, is centred on Japan and the US, the SSA analytical framework is readily transferrable to the EU. The narrower sense of SSA institutionalism can be clearly demonstrated with regard to difficulties pre-Eurosphere German capitalism faced, as a result of the institutional structuration of German banks. At the time, the German financial system comprised the country's major commercial banks alongside both state-owned and municipally-owned banks. The public banks were committed to lending to promote local business rather than to maximise profits, and because they had direct credit-backing from local governments (which enabled them to raise funds on favourable terms), they were able to lend at much lower rates than the major private banks. As a result, the combined market share of the four major banks (Deutche Bank AG; HVB Group; Dresdner Bank AG; and Commerzbank AG) was only 14 percent of all loans advanced to the individuals, companies, and governments of the day.

An example of the broader sense of the institutional features of SSAs can be seen in France, where agriculture continues plays a very important role in the habits, customs, and expectations of French people even though in quantitative terms it accounts for less than 2 percent of GDP, and continues to fall each year[8]. And, France's central role in, and commitment to, the EU's Common Agricultural Policy (CAP) is further evidence of this, and is a result of the socio-cultural embeddedness of agriculture in the French psyche, which traces back originally to the transition from French feudalism to state absolutism before France eventually adopted capitalism. The prominence of agriculture was firmly entrenched

[8] From 3.% in 1986 to 1.7% in 2006 World Bank Data (2006)

in the 18th century when the political economy of France was shaped through the ideas and influence of the Physiocrats, or Les Économistes, a body of highly influential economists, notably Quesnay (1694-1774), Turgot (1727-1781), and du Pont (1739-1817). Central to their beliefs was the 'le droit naturale'; the concept of natural law. John Kenneth Galbraith describes their purpose

> …to preserve by reform an ancient society of landed precedence and privilege to which all were committed and to stand off the pretensions and intrusions of merchant capitalism and the unruly, crude and vulgar industrial forces (as they were regarded) that had spawned (1991:50)

Given that this paradigm has been at the heart of French socio-cultural development for 300 years, it is, perhaps somewhat easier to understand the reluctance of successive governments to directly challenge their farmers during periods of industrial dispute. This also may explain the dogged French path-dependent position in this regard, when often in isolation in terms of its bargaining position in EU policy negotiations on agricultural matters, especially those related to CAP.

An SSA then is a set of institutions that supports the accumulation process over an extended period of time, usually a matter of decades. The existence of SSAs accounts for a period of relative well-offness (as in the post-war recovery and unequalled growth 1945 to 1970) alternating with extended periods of stagnation (for example, the world recession with stagflation from 1971 to the early 1980s). Lippit illustrates our understanding of SSAs as a series of questions: what accounts for an SSA's structural integrity; why do they take a long time to form and why do they persist; why do they always eventually collapse, and how are new ones formed? Central to the answers to the first of these questions are the interconnectedness between the institutions that constitute the SSAs and the related concept of their mutual overdetermination. For example, in labour relations, expectations concerning the nature of employment opportunities likely to be available affect the educational system, the jobs themselves affect family life, and employee feelings about health care and retirement benefits are likely to affect voting behaviour and thereby political institutions. In other words, the various institutions of a society are mutually-determinative; with each one overdetermining the others. Lippit continues.

> Moreover, since institutions are also subject to the effects of the full array of social processes and of exogenous events or conditions, there are numerous forces

> contributing to the overdetermination of any particular institution, and any particular institution contributes to shaping the rest of society and whilst also influencing exogenous events and conditions. Of course this means that in the last analysis such events or conditions cannot be fully exogenous and their treatment of such is largely for reasons of analytical convenience (2005:29)

In this way, when we think of an extended period of economic expansion, it is the entire structure of institutions that is involved, and this, in turn, is sustained by the interrelationships among its component parts, and any isolated event or institutional change will not necessarily bring about the collapse of an SSA, but that such change may well reverberate throughout the SSA overtime, and then begin to erode the glue of the interconnectedness that originally brought the institutions together.

Why then do SSAs take a long time to form and why do they persist? This is because if we think of institutions as being formed by habits, customs, and expectations, then it is normal for them to change only slowly. And while there can be no predetermined length of time an SSA will take to form, or to collapse, the intensity of the internal contradictions, the strength of the impact of exogenous events, and the interactions of the component parts of the SSA will all influence its duration. The very clear shift in capital-labour relations institutions in the UK between the mid-1970s and mid-1980s, when trades union activity was diminished and the balance of power between capital and labour significantly shifted to capital with the onset of neoliberal interpretations of the function of national capitalisms is one such example.

This leads to the question of why SSAs collapse and how new ones are forged. As indicated above, institutions are mutually-determinative, and as well as mutually sustaining each other, they can also concurrently dissipate each other's positions. In the example above, the Keynesian politico-economic management of the UK in the 1970s was found wanting in the face of both increasing internal industrial strife and the largely exogenous factors of world stagflation, the Middle-East war and oil crises, and the escalating war in Vietnam forcing the US to abandon its fixed dollar price for gold. The connectedness of the institutions of labour relations, foreign exchange regimes, central banks' management of interest rates, and a host of others led to the demise of this particular Anglo-US SSA.

What we are presented with here is the notion of SSAs underpinned by the core capitalist accumulation imperative and being defined by a network of contingent institutional structures, which themselves are determined by, and emerge from, their historical

antecedents, external conditions, the other institutions with which they interact and which serve to define their environment, and by the on-going struggles that define each society. Lippit (2005) continues.

> If a society is able to prosper under conditions of rapid accumulation and economic growth, then many beneficiaries will be created, and their support will add to the stasis that tends in any event to characterise institutions. Social structures of accumulation therefore, tend to persist for lengthy periods once established. Ultimately, however, they are subject to erosion as external conditions change and internal contradictions emerge. (2005: 42)

Lippit refers to the durations as 'long waves that characterise capitalist economies' and explain more than just alternating periods of growth and stagnation, each one the result of the other. For these reasons, each new SSA represents a new phase in the development of capitalism in each country. As Lippit observes, 'the SSA formed at the beginning of the 21st century is quite different from its post-World War SSA, and that consequently contemporary American capitalism is quite different from the capitalism that existed in the 1950s'. In essence American capitalism, like every other national capitalism, overcomes its recurrent crises by reinventing itself each time.

It is with this in mind that we can think of the Eurosphere as a set of interconnected institutional structures bound together by the ECB as a new SSA, and therefore embodying a new phase of capitalism in all of the 12 countries sharing the euro, thereby creating an EU supracapitalism. Of course, the ultimate question posed by SSA analysis must be how long can it last?

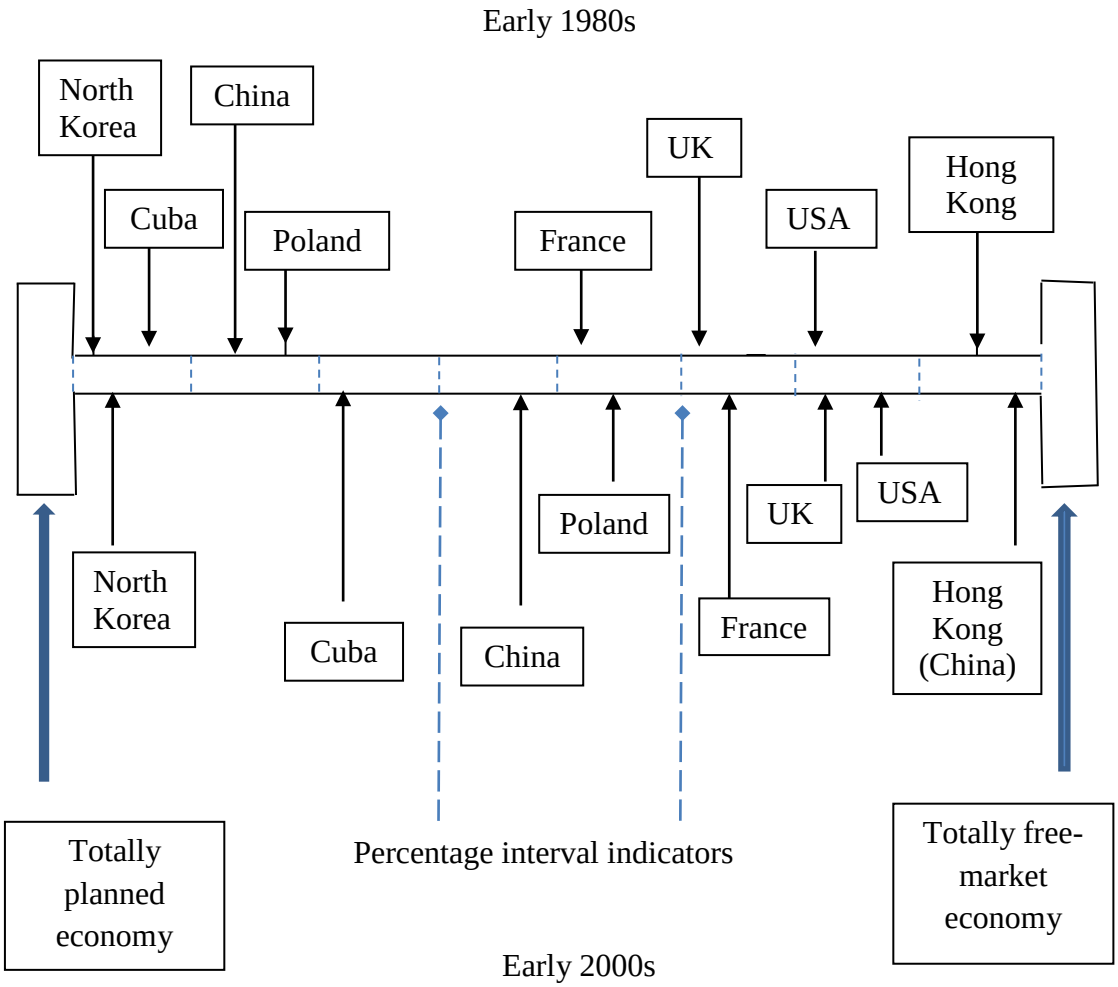
Varieties of EU capitalism

As the empirical evidence and analytical structure relating to the selected typologies of EU national capitalisms in chapter 5 are derived from some elements of the varieties of capitalism literature in general, and loosely from the two varieties promulgated by Hall and Soskice (2001), it follows that this section should follow on from this body of work. However, before doing so, it is first useful to outline out a broad foundation for the consideration of how individual EU national capitalisms may align with any given type of politico-economic system. Initially, Sloman (2000; 2003), Johnson (1982), Henderson and Applebaum (1992) and Henderson (1993) in Dicken 1998), and Story (2000), help set the scene.

First, Sloman schematically illustrates in Figure 2 below how most, if not all, national capitalisms over recent times, have been gradually moving towards free-market management of their economies; a shift many political science and international relations commentators would suggest is evidence of a universal movement towards neoliberalism. This is particularly stark in the case of non-democratic, centrally-planned economies like North Korea and Cuba, who, unlike China, have not officially declared policy shifts towards economic liberalisation. In relation to the EU capitalisms in the illustration, both France and the UK can be seen as moving significantly to the right, and although this is largely unsurprising in the case of the UK as a 'Market-Ideological State' (see Table 3), the French version of a 'Plan-rational/development' political-economy depicted in the same matrix, and, as is interpreted in Table 3 the 'French Statist' model of capitalism, also demonstrates a similar progression towards the free-market economy end of the continuum. The case of Poland, as a former Eastern Bloc (FEB) economy, is somewhat different, Firstly, it would be expected that as a former planned economy, and then immediately after, as an applicant to join the EU and eventually the euro, that the pre-set convergence criteria for the membership of the EU that was achieved in 2004 would automatically pull the country towards a more free-market political economy, but Poland appears to have gone much further than what would have been expected. Nevertheless, what is telling from both the dynamic of the EU countries, and all the other examples in the illustration, is that there is a clear and on-going global shift towards free-market economics. However, such a simplistic observation requires qualification. First, Sloman's model of the sample 'mixed economies' reflects an approximate percentage of government intervention, or admixture of decisions made by the government and those made by the markets. The percentage indicators on the centre bar of Figure 2 are set at about 12.5 percent, and reflect increasing proportions of market influence or decision-making moving from left to right. So, for example, the USA government in the early 1980s would have enjoyed just less than 25 percent of direct involvement in its economy, compared with China's approximate 73 percent contribution, and Cuba at well under ten percent. And, 20 years on China's government can be seen to be moving closer to a 50-50 share with market influence and private enterprise, with even North Korea embracing increased market activity. Additionally, these illustrations are useful to the extent that they provide a basic picture of the mixture of government and the market that exists in various national economies; as well as showing change, and an approximate rate of change over time.

Figure 2

Classifying politico-economic systems and the global shift towards the free-market



Source: adapted from Sloman (2000:2003)

However, the problem here is that the model is both oversimplified and unidimensional. This is because all countries differ in the *type* of intervention as well as the level (Sloman, 2003). For example, governments can be involved through planning, public ownership, regulation, taxes and subsidies, and private-public partnership initiatives. This means that two countries may be in a similar position along the spectrum in Figure 2, but have very different types of government intervention. For instance, and from an EU perspective, the UK's position in the pre-euro 1980s and France's situation in the early 2000s, shortly after the launch of the single currency. Nevertheless, Sloman's basic observations do provide initial indicators for the

general consideration of how national economies may be categorised into useful typologies, and especially so for the present analysis of the EU national capitalisms. From this, it is possible to construct a matrix typology which not only captures all the example countries in Sloman's analysis, and thereby the full spectrum of prevailing global politico-economic systems. The illustration in Table 3 below summarises the characteristics of four such typologies.

Aligning the countries in Sloman's continuum with the above typologies, North Korea, Cuba, China, and Poland in the early 1980s would fall into the 'Plan-ideological state' (as would have other EU former Eastern Bloc economies, Bulgaria, Czech Republic, Hungary, Romania, Slovakia, and Slovenia), with China moving into a position straddling the Market-'Rational/ regulatory state' and the 'Plan-rational/development state', but moving gradually into the latter, where Poland now can be located. It is interesting here to note that within the EU context this positions Poland clearly alongside France, and, to a lesser extent, Italy, within this category. This discussion will be taken up again in Chapter 3 where the EU typology of national capitalisms employed here is outlined. France, clearly positioned as statist-influenced, 'Plan-rational development state' in the early 1980s remains as such in the 2000s, but with a significantly greater market influence in its economy, and more so that the Thatcher-influenced, neoliberal UK of the early 1980s. And, the UK itself, as a 'Market-ideological state', has followed the USA into a much more advanced market-led position in the 2000s, and to an even greater extent than the latter. Hong Kong remains very much at the end of the spectrum, and as is clear from the dynamic, and has probably reached as far as it can go, with a complete lack of government intervention difficult to imagine, especially in the 2000s and more directly under the control of China.

From this general overview and introduction to how national economies may categorised into typologies, the work of Jonathan Story offers the opportunity to begin to 'Europeanise' these groupings into meaningful clusters of EU national capitalisms. Story does so by describing four such types within a post-Second World War 'world financial order' framework, and considers this in terms of different systems within a 'Global Capitalism' (2000:129). Table 3 below introduces these ideas.

Table 3

Typology of national politico-economic systems

Market-ideological state Driven by the 'new right' economic and social policies of the 1980s. Based on a reversion to the state-civil relations of the epoch of competitive capitalism. Policy choices based on ideological dogma	**Plan-ideological state** The state owns and controls most or all economic units. Resource allocation/investment decisions are a state function. State controls redistribution of wealth/income. Policy choices based on ideological dogma
Market-rational/regulatory state The state regulates the parameters within which private companies operate. The state regulates the economy in general but investment, production, and distributive decisions are the preserve of private companies, whose actions are disciplined by the market. The state does not concern itself with what specific industries should exist and does not have an explicit industry policy.	**Plan-rational/development state** The state regulation of economic activity is supplemented by state direction of the economy. The economy itself is largely in private ownership and firms are in competition, but the state intervenes in the context of an explicit set of national economic and social goals. High priority is placed on industry policy and on promoting a structure that enhances the nation's economic competitiveness.

Source: Adapted from Johnson (1982); Henderson and Applebaum (1992, Figure 1) and Henderson (1993) in Dicken (1998:8)

Story (2000:129) introduces the illustrations by suggesting there are two competing views. 'Economic optimists' hold the view that financial markets have 'leapt free' from government control, and these utopians share a vision of 'a radiant future' of convergence, where the world economy is now heading for integration. *The Economist* (1994) agrees 'within a generation' several advanced industrial economies are 'likely to be dwarfed by newly emerging economic giants'. Unsurprisingly, regulatory pessimists, on the other hand, see things somewhat differently. They maintain that imperfections in world markets derive from the distribution of corporate, state, and market power. They conclude that world capitalism is in charge, and that the populations of even the most advanced industrial states and regions are at the mercy of 'autonomised and globally uncontrollable global forces' (*The Economist* 1994). However, Story goes on to argue that both accounts exaggerate. Effectively, global financial markets are the result of competing corporate, and above all, *divergent* state policies and institutional structures, which offer significantly different sets of incentives for all market participants. The globalisation arguments of the 1990s maintain that the 'dominant vision' is one that is stamped 'made in the USA', that is also a 'One-World' vision where there will be shared prosperity, democracy, and better living conditions for all.

Of course, there are a number of problems with this view, not least of which is the ongoing empirical evidence that there is asymmetric distributions of wealth to be found almost everywhere, and that is also very much the case in the US itself. Moreover, the optimists' view fails to recognise the evolution of capitalist diversity, 'complex interactions' and for '*la longue durée'*, between the late 1940s and the early 1970s.

States are embedded in markets, as are corporations, with both actors being members of the world system of nation-states. This might be thought of as a triumvirate form of state-to-state, state-to-firm, and firm-to-firm configuration (Stopford and Strange, 1991). And, as over time, political systems emit very divergent structures and performances into an increasingly interdependent commercial world; ongoing world turbulence is the result. Therefore, it is the contrasting financial systems sitting at the epicentre of individual variable forms of corporate governance that underpin different forms of national capitalism. This means that states are participants in, and are in no way separate from, the financial markets they have jointly conspired to create.

Table 4

Market competition, corporate strategy, and national structures

High ↑ **Corporate Concentration** ↓ Low	**Anglo-American or Anglo-Saxon System** • Large, listed firms • Oligopolistic competition • Diversification • Trade, foreign investment • Larger, limited government • Extensive regulation	**German-Japanese Corporate System** • Large conglomerates • Corporate cross-shareholding • Diversification • Trade, foreign investment • Distinct government structures • 'Self'- regulation pervasive
	Bretton Woods Ideal System • Small, family firms • Price competition • Specialisation • International trade • Minimal government	**French State Capitalism System** • State allocates capital • Lobbying skills • State/family enterprises • 'Cohesion' policies • Pervasive government
	Low ← **Concentration of Ownership** → High	

Source: Adapted from Story (2000:133)

This, in essence, can be seen to characterise the unfolding global financial dynamic from the Bretton Woods agreement in the mid-1940s. And, it this epoch in the history of post-war capitalism where Story's typology of national capitalist structure illustrated in Table 4 above begins. The matrix essentially describes four models: the 'Bretton Woods Ideal' model, together with three other distinct types of national capitalism structure comprising the Anglo-American or 'Anglo-Saxon System'; 'German-Japanese System'; and the 'French State Capitalism System'.

The Bretton Woods model outlines what in 1944 was perceived to be the ideal national capitalism, where minimum government intervention oversees an open economy where small family firms and businesses compete sharply on price, and where survival depends on specialisation and on stable economic conditions. In turn, these conditions are secured by effective government policing of local markets to prevent abuses, as well as negotiating binding agreements on international free trade. A firm within the Bretton Woods model then is content with exporting until foreign governments threaten to impose duties, tariffs, or quotas, and when the exporter will seek to invest abroad to develop alternative markets. The government, for its part, attends to the business of making the country an attractive place for overseas corporate investments by setting policies for favourable taxation and support for education.

Up until the late 1970s and early 1980s, the Anglo-American or Anglo-Saxon (US/UK) system was typified by large, publicly-quoted, and diversified corporations that were managed by executives that dominated shareholder interests until significant changes to the hitherto tightly-linked financial institutions of New York, Chicago, and London. The resultant revival of shareholder capitalism in the early 1980s in both countries meant that private entities are set up by investors for their own benefit, and who then employ managers to look after their business interests at arm's length. Managers control costs such as labour, raw materials, and capital, and in doing so, seek to deploy up-to-date technologies to increasingly enhance efficiency in order to produce goods and services that are attractive to consumers in terms of both value and quality. The financing of these firms is largely provided by relatively short-term borrowing from commercial banks, although the major source of funds is the capital markets. Shares in the corporations are therefore owned directly by individuals or by institutions investing on individuals' behalf, as in pension fund activity. Shares in corporations are actively traded on these markets, and priority is given to paying shareholders dividends, even when profits are falling

When shareholders become dissatisfied with dividends and/or profits, and sell their shares in enough quantity, firms become vulnerable to takeover. This market for corporate assets in turn facilitates mergers, acquisitions, and restructurings. It is here that proponents of the system argue that it is legitimised as providing the most efficient set of incentives for participants in the market by maximising wealth. Moreover, such a shareholder-driven economy is seen to be underpinned by a shareholder democracy where the voting public participates in the performance and rewards of corporations. Through this mechanism the US and UK administrations have engineered a shareholder-driven corporate economy. Indeed, the supporters of this type of system also suggest that such free markets are also politically democratic in the minimisation of government involvement.

Free financial markets also allocate savings to the most efficient apolitically-determined investments. However, labour market legislation must be sympathetic and supportive, in order for labour forces to be grown, reduced, or transferred with the minimum of friction. For its part the government is set the main tasks of providing regulatory and legal institutional structures within which capital markets may function, but also to emplace a safety net for the unemployed, the infirm, and the old. Within this framework, shareholder and consumer interests are paramount, domestic markets are deliberately kept open to overseas competitors and inbound investors. As a result, government policy is less concerned with giving political advantage to national producers than to satisfying the wants and needs of shareholders and consumers alike. Performance is seen to be better assured by diversifying locations of firms and thereby diluting the effect of any particular downturn in any single national market. Linking the Anglo-American system to typologies in Table 4, it can arguably be positioned as market-rational/regulatory, but since the early 1980s, being increasingly shaped by market-ideological influences.

As regards the German-Japanese Corporate System, both countries were late industrialisers and promoted banks taking deposits and investing in the shares of businesses in an attempt to accelerate industrial growth. Both encouraged the development of large corporate conglomerates in private hands and at the same times sought to reduce trade and financial dependency on foreign sources (Story, 2000:135). Managers, bureaucratic mechanisms, and political parties were placed in the driving seats of corporate Germany and Japan in collaborative frameworks. This arrangement effectively calls upon the respective loyalties of the actors whereby their powers are legitimised by a national corporate ideal. Labour, industrial policy and capital markets were designed around a national cohesive polity in order

to overcome the 'wounds of war' rather than as a means of creating an *efficient* economy (Story, 2000:135). In both systems the financial markets are highly regulated to ensure monetary stability and to protect depositors from bank failure.[9] Compared to the UK and US, the amount and volume of shares freely floating on stock markets makes them volatile, as investors, domestic and foreign, move in and out of the market. This effectively means that the majority of activity and therefore, market discipline, is generated by the insider elites (Story, 2000:135) of managers of the corporations and financial institutions. Corporate control is effected by a largely internal allocation of resources within corporations. This is a fundamental departure from the Anglo-American model as it maintains a closer relationship between the external sources of capital, the banks, and capital markets, with the corporations' decision-making processes and, arguably, their governance. In this bank-industrial cross-shareholding way the diverse conglomerates in Germany and Japan are protected from exposure to foreign market access and, therefore, take-over. This in turn allows the domestic market to be launch pad for forays into foreign markets which suggests a more mercantilist approach to world trade. However, as Story observes, this is national mercantilism's 'Achilles Heel' (200:135). The financial system as a whole must be prepared to deal with the consequences of large trade surpluses which flow from the joint corporate interest in markets shares described above, as there is the potential for domestic inflationary pressure. This is overcome by the rapid recycling of funds earned from exports into the building of portfolios of investments in other markets around the world, revaluations of currency, and foreign direct investments to avoid the high cost of domestic production. In this way corporations may become detached from banks as their external source of funds from world markets grow while the banks and other financial institutions increasingly compete in other countries for new clients. This separation in turn diminishes the self-regulatory mechanism. This system can be seen to represent elements of both the market-rational/regulatory state and the plan-rational/development state in Table 3

A third variation deriving from the national economic-political systems described in Table 3, is the 'State-led Financial Market System' which can be seen to lie within the plan-rational/developmental framework quadrant in in the way France has developed its political economy. This model, as it was, can in some ways be considered as a 'half-way house' between US/UK capitalism and the former Soviet planned economic system. Story (2000:136) suggests this model appeals, or did appeal, to those countries whose agriculture

[9] Recent history suggests the German interpretation of this protection is more robust.

was backward, where small businesses dominated and larger corporations were few and foreign-owned. The French Ministry of Finance siphoned off surplus deposit funds taken by the financial and deposit-taking institutions and redirected them to public sector institutions who, in turn, lent them to specific industries such as agriculture, nuclear energy, and regional investment projects.

However, the result of this particular corporate-public funding relationship led to public officials being closely attended by senior managers of large private corporations in those favoured sectors in search of priority distribution of recycled funds. The result of this was a series of contests between competing producer coalitions for a 'silver key' to public finances. In 1981 the new Mitterand administration extended the public sector just as external debt was rapidly increasing and domestic savings were significantly reducing. France then needed to reduce the cost of servicing its public debt and market reforms were introduced between 1984-1988 to promote Paris as a major financial centre, in order to lower the cost of public capital.

This conflation of private and public capital requirements with government redistribution of funds and a more open national stock market effectively led to a political market for corporate control as the top management positions were sought by the elite of state officials. Story (2000:137) argues that this state-led capitalism is unsustainable, as by definition it seeks to allocate national resources for national purposes. With a more receptive stock market foreign investors seek entry and bring with them access (to domestic investors and producers) to new technology, alternative management skills, and above all, access to foreign markets. Inward investors then are competing with domestic producers in their home markets, which prompts national investors to retaliate and enter foreign markets through trade and investment. The state now finds itself torn between its old and its new exposure to freer trade. As the state's corporations increasingly nationalise their domestic purposes and methods must undergo fundamental revision. In the longer term, national corporations conjoin their foreign corporate cousins in the global markets.

In this way, we are now able to establish three theoretical frameworks for early consideration of variations between EU national capitalisms: those states aligned to institutional structures that demonstrate a combination of market-ideological and market-rational-regulatory influences; members adapting a mix of market-rational-regulatory and plan-rational-developmental inspirations; and the third alternative of plan-rational-developmental only. In

EU terms these translate respectively as UK market-influenced, German corporate-influenced, and French state-influenced versions of national capitalism. Schmidt (2002) describes the three as models of capitalism, and translates these as market capitalism, managed capitalism, and state capitalism. Market capitalism is where the liberal state allows economic actors to operate autonomously, and to decide for themselves on the directions of their economic activity. Managed capitalism describes the enabling state that encourages economic actors to operate co-operatively and to co-ordinate the direction of their activities with one another and the state. And, state capitalism portrays the state as an interventionist organiser of co-operation among autonomous economic actors and directs their economic activities (2002:107).

Effectively, this offers a departure point, although only that, for a closer examination of the potential for a greater variety of capitalisms that now constitute the EU, and it is important at this point to differentiate between the literature that broadly encompasses a comparative political economy perspective, and which attempts to variously embrace all, or most, of the differing types of national economies; and the narrower, which some would argue, is not really a varieties of capitalism narrative but more a dichotomous, or n=2 view, that of the *Varieties of Capitalism* text by Peter Hall and David Soskice. Colin Hay begins by positing a challenge to the text based narrowly on what he describes as micro-foundations-based rationalist variant of neoinstitutionalism, and one which he views as overlooking the sociological and historical elements of the new institutionalism (Hay2002:2). The first question here, and one that Hay suggests is essentially an ontological issue, is whether capitalism does in fact come in varieties.

Hay argues…

> It is important, then, that we ask ourselves whether capitalism does indeed come in varieties and, if so, whether the varieties of capitalism perspective operationalises adequately that insight. Though these are independent issues, they are by no means unrelated…
>
> … In other words, one can defend the notion that capitalism comes in varieties without having to defend the varieties of capitalism perspective of Peter Hall, Daniel Gingerich, David Soskice and their various co-authors (2002:3)

This is important, and especially so for this thesis, because although the nominal terms 'Co-Ordinated Market Economies (CMEs) and Liberal Market Economies (LMEs) are used later to nominally categorise two of the proposed five types of EU national capitalism against which empirical evidence from selected macroeconomic datasets is compared, these expressions are employed to represent a much broader neoinstitutional alignment, which attempts to take into account the full spectrum of the neoinstitutionalist variants illustrated in Figure 4.

Whilst acknowledging that national capitalisms do vary, that there are also both institutional variations and commonalities over time, and that these characteristics may lead to 'clustered variation' that is useful to map empirically and to conceptualise theoretically, Hay describes a number of dangers in attempting any attempt at developing a varieties of capitalism approach. Four such potential pitfalls can be identified. First, with the 'growing salience' of transnational institutions, particularly at regional level and especially so with the EU, uni-scalar or dual-scale, approaches to capitalist variation may be cruelly exposed. Second, the tendency towards comparative statics such as the 'British political tradition' and the 'French political tradition', as though they are 'invariant over time' completely overlooks the dynamics of national institutions over time, with the result that there may be an overly incremental and path dependent conception of institutional change, deviations from which can only be explained by reference to exogenous shocks. Third, there is the dual tendency of linking political fatalism with institutional and culture lock-in effects which obviously disallows any real opportunity to embrace political dynamism.

As Hay puts it.

> … if political actors in Britain are, in the end, confined to replicate and reinvent the British political system and the institutions which serve (and service) it *ad nauseam*, then there is little or no place for political dynamism. In a world of path dependent lock-in effects… institutionalists wedded to the notion of capitalist variation principally at the national level are likely to anticipate the replication of national distinctiveness over time, relegating political variables to a rather secondary role (2002:5-6)

And finally, the 'occupational hazard' to over-emphasise the unit level, invariably in this case, the national level rather than the sector level or the system level. Although the prominence of the firm in Hall and Soskice's account does go part-way to consider the

system level in their analyses, the same cannot be said for the system level, where Hay argues 'it is difficult to tell that the objects of analysis are varieties of capitalism as distinct from varieties of exchange economy or, indeed, varieties of liberal democracy' (2002:6). As Howell (2003) notes, 'Capitalism is an empty vessel in much of the analysis'.

So here there are a number of questions raised about the notion of a generic varieties of capitalism analytical framework as based on the ontological view that capitalism does indeed come in various forms, and that these are essentially groups of national capitalisms; the assumptions about, and dependence on, a micro-foundations-based rationalist variant of neoinstitutionalism; and also the dualistic categorisation of Hall and Soskice's LMEs and CMEs. On this last point, Hay points out that the depiction of LMEs as institution-light and CMEs as institution-dense may suggest that CMEs are potentially more fragile that their LME counterparts, although Hall and Soskice confuse us here by saying that LMEs are not un-co-ordinated, but rather co-ordinated in different ways - and by markets (Hall and Soskice, 2001:Introduction chapter). However, this only works if it is either assumed or believed that markets are self-regulating, or as Hay puts it 'self-equilibrating', which they are patently not. Markets exist partly as a consequence of the centrality to LMEs of commodification and marketization, that are, are often products themselves of the 'institutionalisation of market incentives' and associated rationalities.

An analytical framework that is ostensibly based on a 'clear' dualistic distinction, will always face difficulties when presented with the kind of developmental tendencies that have been a demonstrable feature throughout the history of the EU in general, and of its national capitalisms in particular. So how does such a dualistic cluster stand up to perhaps the emergence of a new variety of capitalism, and so be faced with moving from two to three or more varieties? What of the potential for a subsumption of one variety by the other, thereby moving from two varieties into one? How would the approach deal with one national capitalism moving into the other variety? There is also the twin question regarding convergence and divergence: what of potential convergence and divergence of capitalisms *within*; or convergence and divergence *between* either variety? And, what of the possibility of greater or lesser variation amongst *all* the national capitalisms contained in both sets?

To sum up, Hay's observations leave us with a clear view that while there is utility in both the generic varieties of capitalism comparative framework and Hall and Soskice's dualistic varieties of capitalism perspective, care must be exercised especially in terms of paying due

attention to the need to consider the full neoinstitutionalist spectrum with its seven variants spanning the rational-choice economic quantitative through to the normative political qualitative of the former; and also the dualistic and static limitations of the latter. In essence we are pointed towards thinking more about variations of institutionalism, rather than variations of capitalism. And, this is obviously a major consideration of this thesis as the notion of an EU supracapitalism demands the need to illustrate just how the 25 members of the EU and the 12 members of the Eurosphere, each with their own particular neoinstitutionalist profiles may react to, or interact with, the supra-institutional complexities of the EU in general, and the ECB in particular.

EU Integration and the conception of Europeanisaton

While the foregoing passages have so far focused on the evolution of capitalism in relation to the EU, and an examination of the broader scope of the varieties of capitalism genre, the potential for an EU supracapitalism also requires an exploration of the literature covering EU integration. This can be seen as having two dimensions in the context of this thesis: the broader aspect of European integration based on economic integration as a precursor to political union; and the narrower issues surrounding Economic and Monetary Union (EMU) and the ECB as the central institutional actor of an EU supracapitalism.

Hooghe and Marks (1999) perhaps offer a suitable starting point by considering EU integration as a 'struggle' in the making of a polity. For them, European integration has been a twin process of polity-creating and market-deepening. The Single European Act (1986) and the Maastricht Treaty (1993) effectively ensure market integration where a wide variety of nontariff barriers have been reduced or eliminated; while institutional reforms have created a single, although diverse polity. This polity is seen to be a system of multi-level governance that 'encompasses a variety of authoritative institutions at supranational, national, and sub-national levels of decision-making' (1999:70). What is of particular relevance to this thesis is their view that the failure of Keynesianism in the face of the neoliberal interpretation of national capitalisms, was not simply the failure of a particular set of macroeconomic policies, but the 'failure of a mode of policy-making that was distinctly national'. In essence, then we have the view here that the former national interpretations of how capitalist economies should be run were no longer valid, and that collective institutional management may be a viable alternative. They stress that European integration is an 'irreducibly political, as well as an economic process' (1999:71). The result of these ideas of a struggle for an EU polity with

supranational, national, and sub-national dimensions, together with the part failure of national economies to harness capitalism and the onset of the neoliberal agenda yields a 'spaces of contestation as illustrated in Figure 5.

For Schmidt (2002), there is the need to consider the concepts of both 'Europeanisation' and European integration. Europeanisation is thus seen as either a sub-text to the many and varied characterisations and interpretations of globalisation, where it can be either a reaction to, or feature of, globalisation; or a reactive challenge to the very existence of the phenomenon of globalisation (see Hirst and Thompson, 1992:1996). In general, Europeanisation can be viewed as a post-Second World War movement which set out to end war (in Europe) and fight communism by embracing Germany, while containing the Soviet Union and its Eastern Bloc allies economically, as well as militarily. For the countries that were to eventually form the EU, regional integration represented not only a way of ensuring peace, it also appeared to answer the problems of international and inter-European competition, thereby running counter to most globalisation theories, and also supporting Hirst and Thompson's proclaiming of regionalisation as an alternative view. As its mandate grew from a narrow focus on co-ordinating structural adjustment in the sectors most linked to the problems that fuelled the Second World War, to promoting and organising trade liberalisation and economic development across sectors of industry. Subsequently, pressures related to Europeanisation have significantly increased on EU member-states not only in terms of market liberalisation and capital mobility, but also in terms of the drive towards a clear political programme for European integration (Schmidt 2002:41). In this way, Europeanisation has effectively moved on from the early modest effects of a post-war programme for 'little more than a customs union' to the dramatic changes related to a programme for common defence, economic, and monetary policy along with enlargement to the east; the latter being seen with the 2004 accessions of the Czech Republic, Hungary, Poland, Slovakia, and Slovenia together with the three Baltic countries. This view of the process can best be seen as EU decision-making exerting economic, institutional, and ideational pressures on member-states, who in turn, through their individual policies, practices, and politics establish economic, institutional, and ideational positions that converge and transmute into European integration. The establishment of EMU, the creation of the ECB, and the consequent launch of the euro are illustrations of this process.

However, Howe (1995) views the concept of European integration somewhat differently. Considering the 'requisite underpinnings for a community of Europeans', Howe begins by

unpacking earlier explanatory frameworks regarding European integration that centre on levels of government. The creation, expansion, and consolidation of the EU owe much to the determination of statesmen to forge into a 'common community the historically-divided countries of western Europe'. The continuing integration within the EU since 1957 has largely been the product of forceful initiatives on the part of governments. However, for the fuller, and perhaps more meaningful ongoing EU integration, Howe looks to two theories of community, by starting with the notion that in modern liberal communities there is an 'abundance of norms' that require some measure of altruism on the part of citizens. For example, the payment of taxes often amounts to nearly half of people's income, in order to support the welfare state and the provision of numerous other public goods and services. 'Individual citizens', argues Howe, 'in complying voluntarily with such norms, demonstrate a willingness to sacrifice their own interests to the interests of others, many of whom are complete strangers' This is considered in the historical scheme of things as unusual. Perhaps, citizens of modern liberal communities recognise some intrinsic value in their fellow citizens (1995:29). Assuming for now that we consider the EU as a modern liberal community, Howe draws on the theories of Anthony Smith and Karl Deutsch to explain how, at different historical stages, people, by attaching importance to different shared elements, can come to have new notions of the boundaries community.

Smith (1986;1988;1992) begins by rebutting the oft-repeated argument that national communities are fabrications, with little substantiation in ethnicity, and as being largely concocted by 19th and 20th century political leaders and the print media to promote the acceptance of capitalism as the only meaningful and effective politico-economic system for the promotion of citizens' well-being. Smith argues that while the ethnicity, and ethnicities, of today of differ from the ethnicities of the past, and that while ethnicity has now been joined by important civic elements that can have transferable sub-national, national, regional, and supranational influences, its importance has often been overlooked by those blinkered by an unquestioning conviction of the modern state as the sole unit of analysis. Smith points to the use by national leaders of historical memories and myths about a nation's ethnic origins to buttress national unity, and also the high rates of failure when there is no visible, 'pre-modern' ethnic community available to 'lend credence to these myths'. Moreover, while nationalist histories may be modified over time, there is often in many instances an unbroken thread of evolution from pre-modern ethnic community into modern nationhood.

However, these ideas are not easily transferrable to the EU, where Smith sees the 'prospects for a community of Europeans as bleak' (Smith, 1992). Europe will have difficulty in competing with the existing array of multiplicities of language groups, ethnic heritages and sentiments, myths, memories, and symbols. In matters of ethnicity, culture, and history, there is little, if anything uniquely European; and certainly nothing as compelling as that which sustains existing national sentiment (Smith 1992:65). For EU integration then Smith is suggesting that the past is problematic; but Howe suggests that this can be addressed by looking in the other direction: to the future. Starting with the first reason for the creation of the EU, that of the shared European-wide lesson as to the savagery and futility of war, and the need to do everything possible to prevent another European war, the European project can start being oriented towards the future and to collect and reinterpret national history over time. In this way, it does not need, in order to succeed, the sort of ancient ethnic and cultural history Smith imagines is necessary for any community. Many European leaders are looking out on a brave new future, are 'enjoining their people to be more expansive in their communal sentiments, to see in each other something that transcends ethnic and differences, a common purpose and destiny' (Smith, 1992).

Karl Deutsch sees social communication as the key to building and sustaining communities. For Deutsch, political institutions encourage community because they foster, as they have to, communication. Deutsch does not reject alternative theories of community that embrace national sentiments such as 'language, territorial residence, traditions, habits, historical memories, and the like' (Deutsch, 1966:17). As Howe notes, there is, Deutsch freely admits, a certain correlation between each type of characteristic and nationhood. However, some of the most frequently cited objective characteristics of a people, such as language, do not seem to be essential to its unity; for example, Switzerland (Deutsch,1966). According to Deutsch, the essence of community is 'the ability to communicate more effectively, and over a wider range of subjects, with members of one large group than with outsiders' (Deutsch, 1966:97). However, this simple, although very reasonable, theory requires some qualification, and certainly so before it could in any way be useful as an insight into the notion of an EU community. First, although Deutsch is very clear that cohesive communities are marked by distinctly superior communication networks. However, Howe argues that it is 'sometimes unclear, in his various works', where the superiority is to be found. For example, is it the quantity of communication, such as mail flows or travel links, moving between the residents of a particular territory that make them a discernible community? Or, is it the quality of their

communication, or the 'fidelity' or clarity with which ideas are transmitted from one individual to the next? Unfortunately straightforward answers do not really help much. Intuitively, most would argue that quality is the most important, but does that mean that those groups who communicate little but understand each other very well are more of a community than those who communicate very often, but sometimes misunderstand each other. Put like this one would probably opt for the former, largely because it is likelier to engender a more cohesive community. Finally, and perhaps most importantly in terms of the EU as a community, Deutsch stresses a 'historical process of social learning in which individuals, usually over several generations, learn to become a people' (Deutsch, 1966:174), and in doing so sees integration in this way as a long-term process. So, for the EU, increased mail links, shared and standardised information communication technology (ICT), travel, trade, and a general increasing and improving interconnectedness would seem to be the order of the day. However, and linking with Smith's ideas, this will only lead to an effective community of Europeans, if, over time, Europeans also successfully generate a shared combination of learned memories, symbols, habits, operating preferences that together underwrite the crystalline communications essential to the modern community Deutsch, (1966:96).

To summarise, Howe concludes by reminding us that there is probably no single factor alone that determines the readiness of a population to receive and digest new beliefs about the boundaries of community. What matters is the cumulative impact of a whole series of conditions and influences; and the achievement of this threshold may be necessarily rare (Howe, 1995:45). Clearly, then there are only certain populations in which a new belief in community has much chance of taking hold. And, at this point in time for Howe, the EU would appear to be such a group. At the time of Howe's narrative EMU was moving towards its later developmental stages, the population of the EU was over 30 million more than that of the US, the free movement of people, goods, labour, capital was moving apace, 12 countries were to adopt a single currency and share a supranational central bank, and the EU parliament had been operational for 14 years, and English has largely been adopted as the EU's 'business language'. It would appear then that there is, by default, a *de facto* European community in existence, and perhaps has been so for a while; the extent to which this can be seen as a 'community of Europeans' remains a moot point. However, for purposes of this thesis, these operational community aspects of integration can be taken sufficient, if not yet optimal.

Remaining with the broader issues concerning European integration described above, and with the nexus of integration and notions of community in mind, leads us directly now to

consider a range of international relations theories regarding European integration. In ‘mapping the mainstream in international relations’, Hay (2002:13), sets out a contemporary comparative framework of theories that comprises neoliberalism, neorealism, constructivism, and postmodernism. As one would expect, the first two ‘neo’ categories each have antecedents and derivatives, and in schematic form, Hay illustrates these for us. Classical realism being identified as being the forerunner to structural or neorealism; and with idealism its counterpart for neoliberalism. In turn, neoliberalism is also shown as encompassing the guises of pluralism, liberalism, liberal institutionalism, interdependence theory, and liberal intergovernmentalism. With these two positions seen as the ‘core’, Hay also introduces to the mainstream, although perhaps somewhat contentiously, constructivism and postmodernism.

However, for now it is to neoliberalism, or more specifically, its liberal intergovernmentalism form, that is employed to further consider EU integration. Indeed, it is an approach that is difficult to ignore, especially as it can be seen as one of a group of leading theories that seek to explain, in their own way, the evolution of the EU as the most successful example of institutionalised international policy co-ordination in the modern world. Andrew Moravcsik (1991;1993;1995;1997;1999) introduces the theory of liberal intergovernmentalism to not only describe one such theory of EU integration, but also to clearly lay down a challenge to another mainstream rival, by setting out perceived limitations of neofunctionalism. Neofunctionalism, developed and refined between 1955 and 1975, Moravcsik (1993) argues, ‘remains the most comprehensive and sophisticated attempts to provide a general theory of European integration’. Since 1975, despite many insights into case studies relating to specific issue areas, overviews of EU history, and ongoing criticisms of neofunctionalism, no comparable theoretical synthesis has appeared (1993:474). Nevertheless, Moravcsik argues that, contrary to claims that European integration can only be explained terms couched in, and influenced by, general theories of international relations, the EU can (and should) be analysed as a successful intergovernmental regime which is designed to manage economic interdependence through negotiated policy co-ordination. Therefore, refinements and extensions of existing theories of foreign economic policy, intergovernmental negotiation, and international regimes provide a credible and generalizable explanation of its evolution. These theories rest on the assumption that state behaviour reflects the rational actions of governments constrained at home by domestic social pressures, and abroad by the strategic environment(s) they may find themselves in. Moravcsik continues by also suggesting that an understanding of the preferences and power of EU’s member-states is a logical starting point

for analysis (1993:474). Moreover, that the EU is undoubtedly a unique institution in its own right does not necessarily require it to be seen as one of its own kind, or put another way, does not require a *sui generis* theory.

Firstly, as regards the limitations of neofunctionalism, Moravcsik points to the neofunctionalists' central prediction that the European economic integration which was (is) seen as the precursor for eventual political integration would be self-sustaining. Central to this idea was the notion of 'spillover', where initial integrational steps trigger endogenous economic and political dynamics leading to further co-operation. Neofunctionalists identify two types of spillover: functional and political. Each is considered to both deepen and widen integration by working through interest group pressure, public opinion, elite socialisation, or other domestic actors and processes. Functional spillover, which is economic in nature, occurs when incomplete or slowing integration undermines the effectiveness of existing policies and therefore creates pressures for further deepening and widening policy co-ordination. Political spillover happens when the existence or formation of supranational organisations sets in motion a self-reinforcing process of institution-building. The effective regulation of a modern, integrated international economy requires technocratic oversight by supranational authorities.

However, Moravcsik notes that despite its 'richness of insights', neofunctionalism is now widely regarded as having offered an 'unsatisfactory account of European integration' (Moravcsik, 1993:475). There are three main reasons for this. First, in the mid-1970s neofunctionalists had largely convinced themselves that what they then called 'regional integration theory' having explained the progress of the EU (then the EC) should be supplemented or supplanted by a general theory of national policy responses to international interdependence. Rather than focusing on the future aspirations that make the EU unique, they preferred to believe that the existing aspects of the current activities of the EU were already generalizable. Second, because the neofunctionalists were concerned with inexorably moving towards a terminal position called 'political community' as a unique and potentially federal structure in Europe that would prevent war and guarantee peaceful change, and whilst remaining under the assumption that the two types of spillovers would endure and continue to be automatic mechanisms for progress towards integration, oversight was lost in terms of important policy areas such as external tariffs, agricultural prices, and regulatory harmonisation. And third, again during the 1970s, an increasing realisation among neofunctionalists regarding the need to meaningfully incorporate theories of national

preference formation and intergovernmental negotiation, both grounded in in assumptions about actor preference, choices, and constraints. Effectively, neofunctionalism had been mostly describing the progress and evolution of the EU when there was a growing need to explain it.

So then what does liberal intergovernmentalism offer in terms of explaining EU integration? Moravcsik offers a two-stage approach. In the first stage, national preferences are primarily determined by the constraints and opportunities imposed by economic interdependence. In the second, the outcomes of intergovernmental negotiations are determined by the relative bargaining power of national governments, and the incentives that for the creation of institutions created by increasing transaction costs and the desire to control individual domestic agendas. Moravcsik reinforces this by suggesting that this approach is grounded in the fundamental concepts international political economy, negotiation analysis, and regime theory Moravcsik (1993:517).

Therefore, the economic interests of producers and popular preferences for public goods and services offer a solid foundation for explaining industrial trade liberalisation and agricultural policy formation, as well as socio-economic public goods provision within the EU. These preferences indicate the goals of individual states, their alternatives, and the extent to which governments may then wish to compromise. Furthermore, the outcomes of intergovernmental negotiations are shaped by unilateral and coalitional alternatives to agreement, in addition to opportunities for compromise and association-forming.

EU institutions usually delegate and pool sovereignty by taking key decisions about linkage out of the hands of national governments. This delegation and pooling of authority of supranational authority in the EU can be explained by extending existing functional regime theory which holds that international institutions affect the behaviour of other states or international actors. It assumes that co-operation is possible in the anarchic system of states, as regimes are, by definition instances of international co-operation. Governments weigh the potential gains from co-operation against the domestic political risk. However, governments also delegate authority and provide for qualified majority voting in order to increase the efficiency of bargaining at the expense of slightly increased political risk for domestic groups.

Therefore, by bringing together theories of preferences, and bargaining and regimes, liberal intergovernmentalism provides credible accounts for many aspects of the major decisions in

EU history. It sharply contrasts with neofunctionalism in the following ways. Firstly, neofunctionalism emphasises domestic technocratic consensus; where liberal intergovernmentalism looks towards domestic coalitional struggles. Secondly, where neofunctionalism emphasises opportunities to 'upgrade the common interest'; liberal intergovernmentalism stresses the role of relative power between national governments. Thirdly, where neofunctionalism propounds the active role of supranational officials in shaping bargaining outcomes; liberal intergovernmentalism highlights instead passive institutions and the autonomy of national leaders. Moravcsik adds here 'Ironically, the EC's (EU's) 'democratic deficit' may be a fundamental source of its success' (1993:518).

Liberal intergovernmentalism, while not readily aligned to the main supranational thrust of this thesis, does appear to offer a cogent alternative to the once embedded ideas of neofunctionalism as an explanatory mechanism for EU integration. However, it does have its critics; and they generally point to three areas. First, there is a question regarding the basic theoretical framework, in that state behaviour is not necessarily pre-determined and instrumental; national preference formation does not always precede the formulation of strategies; or that national preference and intergovernmental bargaining are mostly subjugated to, and manipulated by, supranational actors. Second, critics may challenge the liberal understanding of state preferences, which calls on contemporary theories of economic interdependence in order to explain national preferences. This is largely because alternative understandings of economic interest are both possible and readily available. And third, they may also question the intergovernmental explanation of bargaining, with its stress on negotiating power rooted in unilateral alternatives, competing coalitions, the possibilities for associations, and the controlled delegation of power up to supranational institutions.

However, it is, as Moravcsik strongly emphasises, difficult to deny the importance and relevance of preferences and power altogether (1993:519). Indeed, within the context of this thesis in general, and the later arguments regarding a suitable typology of EU national capitalisms in particular, national preference and power formations, both individual and collective, play a central role in employing national capitalisms as units of analysis in any meaningful comparative political economy exercise. And, while Moravcsik and his liberal intergovernmentalism clearly afford supranational institutions less weight and prominence than neofunctionalism did, he does encourage ongoing debate between general theories of domestic and international politics rather than a 'clash between 'intergovernmentalist' and 'supranationalist ideal-types' (1993:519).

As a footnote, and contrast, to Moravcsik's argument in some of the foregoing discussions regarding liberal intergovernmentalism and its role in European integration, Thomas Christiansen's contribution offers an insightful study into the role of supranational actors in EU treaty reform negotiations at intergovernmental conferences (IGCs). The salient points from Christiansen (2002) are summarised below.

The study of supranational agency confirms the need to analyse treaty reform as a process, to consider its structural elements and the way in which structures interact with action. The main points are first, IGCs have a structure consisting of rules of governing the interaction among players. Supranational institutions may not necessarily be the strongest players with respect to the negotiation of outcomes, but they have considerable influence in the setting of the rules, and therefore in the structuring of the IGCs. These formal and informal rules rely on established practices governing EU policy-making, and have been imported as a side-effect of relying on the exiting institutional structure of the EU. This includes the use of fora like the European Council and the General Affairs Council for the debate of IGC matters; the familiarity of participants, whether representing member-states or EU institutions, with existing procedures, but also the very involvement of supranational actors in the negotiations who have both an interest in, and a habit regarding, extending those working methods to the IGC. Therefore, Commission President Delors had a major role in the setting up of the first, major IGC of recent times, not only in terms of substantive issues, but also in terms of the format and the structure of the talks. Without such a strong Commission influence at the time, probably an entirely different format of negotiating treaty reform would have evolved. Less obvious, but nevertheless much more consistently, the involvement of Council Secretariat together with its legal service have ensured that IGC negotiations have remained wedded to the standard operating procedures of the EU, regardless of their different constitutional status.

Second, a particular aspect of this institutionalisation is the provision of a process for agenda-setting that is fairly open, and which is also tied to the existing EU policy process. It includes consultation of other institutions and participation of their representatives in arenas of 'structured reflection' and also permits them to commission special reports from independent advisors, or 'wise men' (Christiansen, 2002:50). This participation in the agenda-setting phase of the IGC, in turn, provides a privileged platform from which to generate a wider public discourse about the need for, and the aims of, EU treaty reform. Even if, as Moravcsik appears to imply, such ploys do not have a direct effect on the IGC negotiations at hand, they

do tend to create an air of expectation which means that issues will be addressed at future IGCs.

Third, supranational institutions have a special role in the legitimation of treaty reform, owing to their particular standing among the IGC actors. They stand apart because they do not possess formal veto rights over outcomes of negotiations, but at the same time they can claim to represent the common European interest, and to protect this against certain challenges by national governments. Because of this they occupy a certain moral ground, although not necessarily a higher moral ground, which 'may induce specific dynamics both inside and outside the conference room' (Christiansen, 2002:50).

Fourth, representatives of supranational institutions at IGCs are participants in a social process. The IGC negotiations are conducted by a select group of individuals, and not by either member-states or supranational institutions. Personal relationships among conference participants, therefore, do develop over time, and at the same time the duration and intensity generates an *espirit de corps*. In terms of their specialist knowledge of the substance and working methods of the IGCs, and the value which they come to add to proceedings, the group can be considered as an epistemic community. This development is one particular aspect of the social process of European integration which occurs at the domestic, as well as the transnational European level. Interestingly, this process is recognised by rationalists and social constructivists alike (Moravcsik, 1999: 267-306).

This transnational community of negotiators conducts the everyday IGC proceedings, often in the face of opposing political positions imposed by national governments. However, they are also operating in an environment in which the continuous and long-term interaction among group members becomes a unifying element, and where ideas and knowledge, independent of their origins, can have an impact on negotiations, notwithstanding the potential for subsequent disagreements or vetoes on political levels. (Christiansen, 2202:51)

Synthesis

Although there are further intrinsic treatments of the literature is subsequent passages, especially those relating to constructivism and institutionalism in the next chapter, heterodox challenges to mainstream neoclassical understanding of national capitalism and the role of money, and an extension to the commentary on varieties of capitalism, the main purposes of the literatures in the above passages have been threefold. First to link evolutionary aspects of

capitalism to the contemporary national capitalisms of the EU; then to identify salient explanations of EU integration and Europeanisation in relation to the notion of an EU supracapitalism; and finally to identify and locate a theoretical framework which can support such a notion. The evolutionary literature seems to point towards the potential for a new form of capitalism emerging given the required social preconditions, and that a given set of appropriate institutional structures such as the ECB and the Eurosphere, may constitute these requirements. Furthermore, the existing extensive bodies of work on EU economic integration and varieties of capitalism offer substantial analytical utility, and are of considerable value in understanding certain aspects of EU national capitalisms in general, and Eurosphere economies in particular. The central aspects of methods of similarity and methods of difference are utilised alongside elements of both eras of integration commentary in Chapters 3 and 4. And, the ECB is discussed in relation to the supranational management of the 12 Eurosphere capitalisms, and in Chapter 3 where an analytical typology of EU capitalisms is advanced.

However, it is important to emphasise that, with the exception of the SSA explanations which do, to some extent, facilitate both opportunities to consider alternative interpretations of national capitalisms, and also to more closely examine differing institutional architectural dynamics of individual capitalisms over time, the ultimate limitations of these literatures is that they do not explicitly address three of the key issues of this thesis. The first of these pertains to the episodic failures of collective national capitalisms as politico-economic systems, and the recurring regenerations of capitalism, which, in turn, become future episodic failures. Secondly, and in line with the first point, is that they overlook the redistributive problems highlighted in the introduction chapter, largely because in the majority of the material covering EU capitalism and national capitalisms, the overall nature and characteristics of capitalism are treated as accepted ‘givens’, and as such are not meaningfully addressed. The varieties of capitalism literatures look toward national or collective national interpretations of virtually the same mutually-accepted nature and character of capitalism. And finally, there does not appear to be anywhere in the bodies of work discussed above, whether economic or political integration or varieties of capitalism, a serious challenge to the neoclassical view of the core functionalities of national economies, and especially so regarding the actual role(s) of money in the overall financial management of these economies. These concerns are referred to in a number of the following passages, but specifically so in Chapter 6.

Chapter 2 The ECB and the Eurosphere as social constructs: a constructivist-institutionalism approach

Introduction

The value of bringing an institutional political science approach alongside a constructivist international relations perspective is seen by Dyson (2000) to address the meaning of power in, and of, the Eurosphere, and together see its matters of interests as Wendt (1999) notes, largely a function of ideas. The neoinstitutionalist approach is employed here in two ways. Firstly, it assists us in understanding the movements and forces behind these Eurosphere dynamics; and secondly, it helps to highlight the potential for collective identity and accepted norms within the Eurosphere. As Dyson argues, these aspects of European integration tend to elude the realist approaches (2000:8), which view governments as rational and self-interested actors characterised by interests in power, security, and wealth, and which are exogenous givens and root states in the mind-set of considering other states as rivals or enemies, rather than as partners. Here, the use of sociological institutionalism helps us to see institutions within the Eurosphere as working towards less of a constraining type of behaviour as portrayed in the rationalist approaches, and more like mechanisms that shape how identities are perceived, interests are defined, and power is deployed. The 'thin' constructivist, and 'thick' constructivist perspectives are ways of viewing the Eurosphere as morally defensible, whereby the value, and values, of seeing Eurosphere members as partners or friends as opposed to rivals or enemies, is underpinned by inter-state relations based on mutual aid rather than self-interest. Two early, pre-Eurosphere examples of this can be seen with the formations of the post-war ECSC and Benelux alliances. Moreover, the constructivist perspective can accommodate the complexity, complication, uncertainty, and collective insecurity related to what the future may hold. And, in doing so recognises the difficult process of cultural transformation, identity formation, and interest definition. Possible future changes within the Eurosphere, and between its members (and within and between ex-Eurosphere EU members), together with its collective ability to obviate endogenous and exogenous shocks, will be shaped by the constructivist values of collective identity and shared ideas. As Ben Rosamond (2005) notes, 'constructivism inevitably sheds new light on EU governance simply as it can incorporate more ontologies into its understanding, and a larger arsenal allows it to analyse both endogenously and exogenously'.

Table 5 below summarises the conjunction of neoinstitutionalism and constructivism in an ECB context.

Table 5

A constructivist-institutionalism theoretical alignment to the ECB and the Eurosphere

	Neoinstitutionalism and constructivism	**The ECB and the Eurosphere**
Role of theory	To inform and sensitise analysis to the complexity of the process of change	The need to build a theoretical framework from which to measure and understand the processes of the developing EU centred on the ECB and its Eurosphere
Theoretical assumptions	Complex	Unique and complex
Analytical approach	Sensitising and informative (guides analysis)	The need to analyse differing political and economic trajectories
Method	Theoretically informed; comparative and historical.	Development of theory using comparative, sociological, historical and empirical approaches. The EU, ECB, and the Eurosphere as a set of ideas

Source: adapted from Table 1.9 in Hay (2002:29

With this in mind, the chapter follows a structure that begins with overviews of rationalist, constructivist, and postmodern or reflectivist perspectives, before moving on to consider how a constructivist-neoinstitutionalist amalgam may be applied to the ECB and its Eurosphere by

looking at the Eurosphere through an ECB-centric lens and via selected variants of constructivist-neoinstitutionalism analyses.

The rationalist approaches

During the late 1990s, approximately half way through the prescribed analytical timeframe of this thesis, not only did EMU culminate in the establishment of the ECB, the single currency, and the Eurosphere, but the investigative focus employed by most commentators to understand the development of the EU collectively shifted from the integration process itself towards matters concerning governance. In what is sometimes referred to as the 'governance turn', the integration-focused debate between neo-functionalism and liberal intergovernmentalism gave way to an ideological contest between rationalism and constructivism (Christiansen *et al*, 1999, Moravcsik 1998). This analytical realignment can also be seen as a defining moment of the EU's journey along the path from intergovernmentalism to transgovernmentalism, where the movement towards the building of an EU supranational institutional architecture was viewed as a variant of neofunctionalism; and intergovernmental institutionalism was employed to focus on the state, and convergent and divergent national interests and interstate bargaining (Moravcsik, 1991). Furthermore, the intergovernmental view was, in turn, given by Keohane (1984) to affirm elements of realist foundations in what he describes as the modified structural realist explanation for regional co-operation. And, although Moravcsik (1991:27) argues that 'states are not black boxes' in order to describe that states' interests and the power distributions between them change over time, and therefore that these movements are often decisive in integration processes, both point to rudiments of realist analyses transcending or threading between the above two eras of EU commentary.

At first glance then, it may appear natural that any early explanatory account or longitudinal analysis of the development of the ECB and its Eurosphere up until its realisation in 1999 (and, for that matter, perhaps the EU's ex-Eurosphere as well), should be undertaken from within either of the above two dominant streams of integrationist thought; and that any post-single currency examination of the ECB may be influenced by rationalist or constructivist interpretations, with therefore, some form of rationalism in its broadest sense transcending both phases of analysis. This, in the late 1990s rationalist sense, means either from a neorealist or neoliberalist international relations perspective. In the case of the former, analysis based on the concepts of balance of power, relative gains, and hegemonic stability

theory (HST); and the latter on the central ideas of interdependence, co-operation, international regimes, and absolute gains. Both of these approaches are built on foundations of a number of key themes and assumptions, and a brief outline of these will provide a comparative backdrop to what may be seen, by some perhaps, as the heterodox notion of the ECB and Eurosphere ultimately as social constructs.

Neorealism begins with the view that states can be analysed as if they were unitary rational actors, wholly motivated by national self-interest, by striving to maximise expected utility, and under conditions of the international anarchy they perceive constitute the pre-existing context within which they find themselves. From this, the behaviour of states can be explained solely in terms of the structure of the international system itself, as they are rational and as such seek only one optimal course of action open to them (Hay, 2002). The state is a sovereign, natural unit of analysis, although neorealism does not overlook the role of international institutions in the governance of politics and economics in international relations. And, as unitary actors operating under these conjectures, states seek to achieve relative, rather than absolute gains from other states. In terms of the perceived anarchical structure of the international system, it is this that forces states to act as they do, and although states are, as a consequence, inherently competitive and conflictual, actual conflict can be avoided through the mechanisms that are the result of balances of power. The neorealism approach to world politics, whilst accepting anarchy in the international system, also believes this may be ameliorated if a dominant state emerges from within the system to assume a level(s) of leadership whereby international institutions can provide a reliable basis for co-operation between states. An example of this the post-war Bretton Woods accord, where the US assumed the leadership or hegemonic power of the international economic system. However, as Colin Hay notes, state-centric neorealism does rely on a series of implausible assumptions about the unity and rationality of the state (Hay, 2002:21), and lacks any real lucidity regarding necessary conditions for co-operation or conflict in the international system.

Neoliberalism, having materialised out of post-First World War utopian idealism, aimed to counter this form state centrism, and via the economic dynamics of international relations, to investigate the possibilities for co-operation within the international system. Whilst aligning with neorealism as to the rationality of individuals and states, neoliberalism believes these actors have the capacity to solve problems through collective action, and that such international co-operation is both achievable and desirable. However, other actors like

transnational corporations (TNCs), religious organisations, and nationalist movements also play a central role in international outcomes. Also, unlike their neorealist counterparts, neoliberalists assert that states cannot be considered as unified actors but are multi-centric and subject to a variety of competing domestic and international pressures. For them, power in the international system is dispersed and changeable, and because military force is not the only, or most effective, instrument of foreign policy, liberal democratic states do not wage war on each other. And, also contrary to its 'neo' counterpart, sees states seeking absolute gains, rather than relative ones. The complex world economic system renders states evermore sensitive, and therefore vulnerable, to outcomes in other countries, thus resulting in a significant loss of state autonomy. As regards international institutions and organisations, although themselves a product of state action, they often assume an independent identity and agency. Nevertheless, and similar to neorealism, neoliberalism lacks clarity regarding the conditions under which co-operation or conflict should be expected. It also is considered to adopt a utopian and perhaps naïve understanding of the human condition, and of the prospects for international co-operation. While the role of international institutions is exaggerated, the capacity of the state is understated, and this means that the *status quo* is often either accepted or directly promoted. Critics of the approach also point to the evidence relating to the notion that liberal democratic states do not wage war against each other, and argue that such democratic states can be, and are, often belligerent towards each other.

So, how may either of these 'neo' approaches inform any longitudinal analysis of the ECB and the Eurosphere? Firstly, they both either accept or recognise the importance of international institutions. Secondly, both covet the notion of co-operation, and the mutually-advantageous gains (either relative or absolute) that are to be enjoyed from international collaborative policy frameworks. Thirdly, the state is jointly considered as a rational actor, and therefore offering up an identifiable unit of analysis, although it is conceded that neorealists deem rationality contingent on the anarchic condition of international affairs, while neoliberalists view such rationality in relation to collective and co-operative problem-solving. Fourthly, they both posit a given international anarchy as an explanation for state behaviour. Finally, neorealism stresses the need for hegemonic stability, which the ECB's Eurosphere can be seen to offer, although more in a European regional sense than globally. And, neoliberals emphasise the need for international institutions and organisations, even if, like the ECB, these come to assume an independent identity and display agency in their own right.

Both perspectives then would seem to have some explanatory power, and also potential foundations for an analytical framework. The problem is, however, that both also share an inherent instrumental rationality that takes the objectivity of the social and political world as another given, and that rejects or underemphasises what Hay describes as the 'impact of national norms on international politics and international norms on national politics' (2002:25). Moreover, both these rationalisms fall short in their analytical capability because they both stress the existence of either given, or fixed, national preferences; an emphasis that is reinforced by the shared notion of material interests being objective, uncontested, and transparent. Understanding the decision-making processes of the actors involved in the EU, as expanded upon by Christiansen (2002) above, is crucial to uncovering the motivators that influence policy-making, strategy, and governance. Constructivism, on the other hand, seeks to explore the implications of replacing instrumental rationality's internal logic with a more sociological concept of agency. And, is at this point that the alternative, constructivist approach to international relations may be introduced; first by way of its assumptions and themes, and second as to its potential usefulness as an explanatory mechanism and analytical framework in the context of this thesis

An overview of constructivism

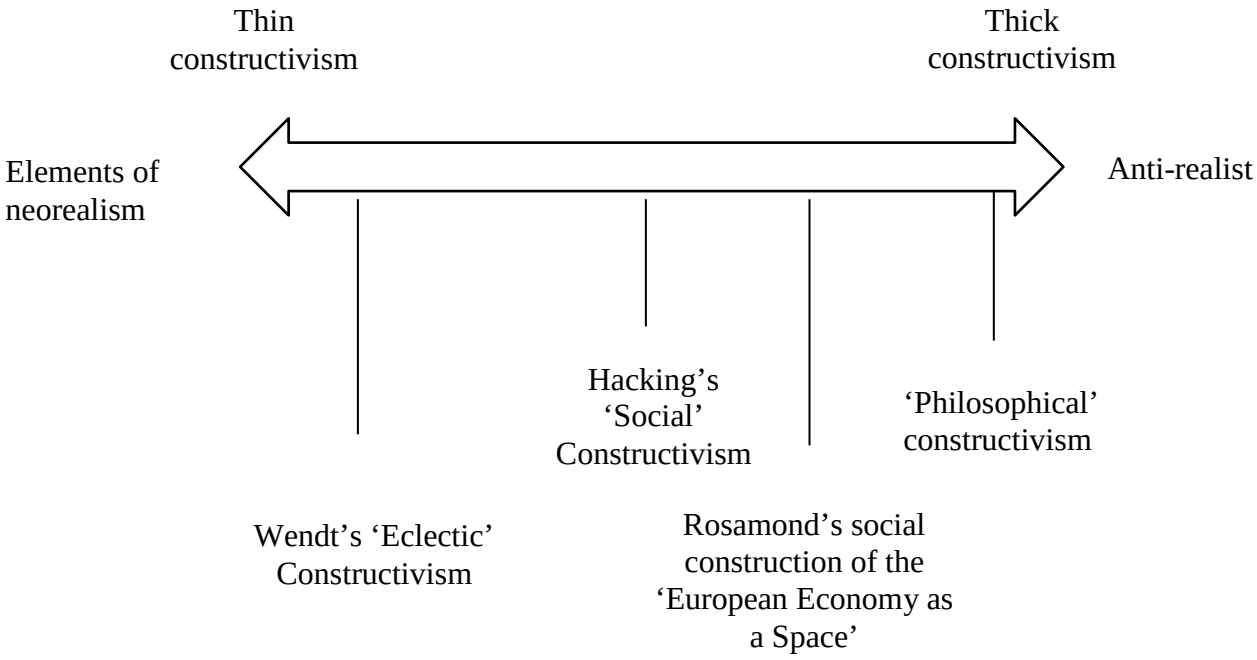
Taking neorealism and neoliberalism together as being rationalist approaches, and placing them at one end of an imaginary international relations analytical continuum with postmodernism or reflectivism at the other, constructivism could be positioned somewhere in the centre ground, or as Adler (1997) suggests, 'a middle way'. From this position, constructivism seeks to recognise and understand the consequences and effects of accepting that political realities are socially constructed, and that (new) ideas relating to the analysis of international relations should be allowed a wholly independent role. Moreover, constructivism pursues the implications of treating preferences and interests as social constructions rather than as objectively given in the way Moravcsik and other liberal rationalists portray them. Constructivists forward the notion that beliefs and visions for the future play a crucial role in the construction of human reality, and therefore the political and social world is not a given, but as Hay puts it an inherently intersubjective domain - a product of social construction (2002:24). This means there cannot be an objective social and political reality outside of human understanding, and it then follows that there is no social realm independent of human activity. A consequence of this is that ideational factors are seen to play both a major and material role international relations.

Further to the above, Wendt, (1999) suggests constructivism stresses that 'anarchy is what states make of it'. This means that, contrary to the rationalists' view, the structure of the international system does not dictate state behaviour; rather it is the interaction and intersubjective understandings of states which gives rise to the condition of anarchy (Hay, 2002). The constructivist perspective allows an assessment of the transformative impact of 'novel social constructions, such as the European Union', on the state system Hay (2002:25). Following Hay further, constructivism also stresses the importance of expansive construction, and, in particular, in the identification and response to international relations such as security threats – where threats are perceptions, and it is these readings of situations that are effectively the bases of responses.

A summary of constructivism might then be a structural theory (or range of theories) of the international system that makes, according to Wendt (1994), the following core claims. First, states are the principal units of analysis for international political theory. Second, the key structures in the state system are intersubjective rather than material. And third, state identities and interests are importantly part-constructed by social structures, rather than given exogenously to the system by human nature or domestic politics. However, as is suggested above by the references to thin constructivism, thick constructivism, and social constructivism, these are variations of constructivism that may be seen to form a series of calibrational points along a continuum of 'constructivisms', with this interpretation by Wendt, as described by Hay (2002), as thin constructivism, say at the left-hand end of the imaginary scale, with the wholly philosophical constructive perspective at the other (See Figure 3 below). The positions on the scale reflect Hay's (2002:200) understanding of Wendt's 'eclectic' variation of constructivism through the above summary. Whilst accepting that the second and third core claims are, by way of their reference to intersubjective and ideational factors, obviously (more) constructivist, Hay clearly locates Wendt's type of constructivism at the thin end of the scale by virtue of it containing an 'unapologetic endorsement of the most fundamental of neo-realist assumptions' in relation to states being principal units of analysis. In this way, Wendt's constructivism accepts (or perhaps embraces), the elements of neorealism indicated in the diagram. If we accept that the polar opposite of this position is the type of philosophical constructivism that is distinctly anti-realist, and some way towards the post-structuralist or postmodern standpoints, then, as Hay points out, there is a 'range of ostensibly constructivist positions in the existing literature' that may be situated between the thin and thick boundary limits.

Figure 3

A constructivist continuum



Source: primary

Whilst an extended discussion of all these individual calibrations falls outside the scope of this thesis, it is useful to indicate perhaps the four most readily identifiable for the purposes here. It should also be noted, that for some observers and commentators, for example Reus-Smit (2009), that social constructivism is not a theory, but rather a viewpoint or analytical framework that has entered the debate in relatively recent times, the key concept of which is the claim that human beings live in a social environment that is constructed by their own behaviour and actions. Moreover, this environment is, furthermore, constantly reproduced by current behaviour and actions. Indeed others, notably Christiansen *et al* (1999:529-531), argue that (social) constructivism as such does not make any substantive claims about European integration, but rather enters the debate on European integration from a different standpoint. Taken this way, it can be seen more as a complementary perspective to other integration theories, where it assumes a different ontological position, say for example, compared to rationalism.

However, as an explanatory and analytical framework, the range of available 'constructivisms' is not without shortcomings. For example, by positioning itself as Adler's middle way between rationalism and postmodernism, constructivism in general may be seen to be too far away from both of these polar perspectives to realistically offer a compromise approach between the two. The actual outcome of this is that many constructivists drift towards one boundary or the other. Moreover, rationalists stress that much of what constructivists claim theoretically is, by nature, untestable, or simply remains untested. For other observers, constructivists are more united by what they oppose than what they agree on. And, in terms of constructivism as it may be applied to EU integration in general, and the ECB and its Eurosphere in particular, it effectively entered the discourse in 1999, and therefore may been seen to not yet have realised it full explanatory and analytical potential.

With the above reference to postmodernism, and given that we are positioning constructivism between it and the two rationalist perspectives, it is perhaps important here to also outline the main themes and assumptions of postmodernism, and, where possible, to identify any contextual linkages with the ECB and the Eurosphere, and before moving on to expand on the justification for a constructivist explanation of the development of the ECB and the Eurosphere.

Postmodernism in context

One of the problems of discussing postmodernism, especially within the setting of the ECB and the Eurosphere, is that all too often the term is used in a pejorative sense by non-postmodernists, anti-reflectivists, or other mainstream commentators to dismiss it just as a contradictory response to almost anything. That is, a sort of a systematic deconstruction of issues but without consideration of doing so with a view to offering a subsequent reconstruction. Indeed, if this were to be the case, then postmodernism is reduced, as a number of its hard line critics assert, to little more than fatalism or even nihilism. A summary of its basic tenets would probably begin with the view that the political and social world has no facts, only interpretations offered from convenient vantage points, and is characterised by difference, diversity, and otherness. The notion of history as a form of progress is challenged or rejected altogether, and that any opportunity to make the world a fairer place is seen as an opportunity to replace one structure of domination with another; there is no escape from tyranny. And, that all other international relations theories, and, for that matter, political science explanations, can be collectivised as just metanarratives.

In terms of its limitations, postmodernism, in its underpinning drive to always seek difference, or otherness, leads nowhere because once the difference is identified nothing further is offered, whereby, rather, the difference is protected; it merely stays as a narrative in its own right. As Hay (2002) asks is not postmodernism itself the metanarrative to end all metanarratives and hence a contradiction in terms? As such, postmodernism cannot advance any sort of meaningful analytical framework, and its explanatory capacity does not extend beyond the descriptive.

However, some elements of postmodernism may be related indirectly, if not directly, to some aspects of the evolution of the ECB and Eurosphere. For example, the notion of an EU supracapitalism itself is predicated on it being a potential new form of capitalism as the result of the nature of its evolutionary regenerative transitions, where we see it continually re-inventing itself in other guises albeit with the same basic underlying imperative, subsequent to it having self-destructed as a result of its own persistent internal contradictions. The postmodernist view here would be that capitalism in general, and a potential EU supracapitalism in particular, would be illustrations of one set of relations of dominance replacing another set of relations of dominance. Also, one the central concepts of postmodernism, that of otherness or difference, can be useful in justifying selected typologies of national capitalisms where, if the notion of contextual contingency, or the formation of groups for certain explanatory and analytical exercises, is accepted, (n=1, n=11, n=12, n=15, n=25, …), and the postmodern view that all the EU national capitalisms, are, and will always be different (where n=25); or as Blyth (2003) observes ‘same as it never was’ where n is some sort of variable constant, or perhaps even a constant variable.

The ECB, the Eurosphere, and neoinstitutionalism

While the array of available analytical approaches to understanding the development of the EU and ECB in international relations terms presents various opportunities for explanation, they do not necessarily offer the chance to construct a fully sufficient analytical framework. There are three main reasons for this. First, the EU, and therefore its institutions, are unique and, unlike other subjects of international relations analysis such as affairs between states, intergovernmental organisations (IGOs), non-governmental organisations, and transnational corporations (TNCs), is a regional grouping predicated on the political *and* economic union of its members states and their individual and collective relationships with custom-built supranational institutions; and therefore demanding certain levels of institutional analysis.

And, if it is accepted that there is such a need for institutional analysis, it has then to be recognised that the building of the EU's supranational institutional architecture presents a number of challenges to traditional institutionalism, but where neoinstitutionalism may offer viable alternatives (See Table 6 below).

Second, the inclusion of institutional perspectives also takes into account and advantage of the parallel trajectories of the EU's development and the emergence of neoinstitutionalism out of traditional institutionalism from the early 1950s. In this way, it can be viewed that in terms of the development of neoinstitutionalism and the EU, three significant relational aspects can be found. The first of these is that the journey for new institutionalism out of, and from, traditional institutionalism coincided with the evolutionary lifespan of the EU from the early 1950s until the present day. This can therefore assist in the analysis of the transition of the EU from a collection of six like-minded states each with its own discrete, embedded institutions to a group of 6, 9, 15, and then 25, perhaps not so like-minded but evermore interdependent capitalisms, where the sinews of the interconnectedness *are* the processes of the EU institutions themselves. Second, that the new institutions of the EU, such as the ECB and the European Court of Justice (ECJ), highlight the need for considering the institution not only as a set of prescribed rules, procedures and organisation, but also as informal fora for human interaction and exchange, and where firms, individuals and government agencies operate in a flexible, trans-organisational way in order to reconcile national and supranational imperatives.

Finally, new institutionalism offers the prospect of the development of theory in the search for an understanding of these relationships. Whereas traditional institutionalists do not see the need for such theory, neoinstitutionalists are interested in testing theoretical-deductive models of how institutions affect behaviour (Lowndes 2002:102), rather than relying on the descriptive-inductive methods of the traditional school.

Table 6

Comparisons of traditional institutionalism and neoinstitutionalism

Concept	**Traditional institutionalism**	**Neoinstitutionalism**
Focus of approach	On organisations	On rules
Formality	Formal	Informal
Dynamics	Static	Continual change by process
Values	Submerged, not visible.	Overtly critical stance
Perspective	Holistic	Disaggregated
Position	Independence	Interdependent , featuring embeddedness

Source: derived and constructed from description in Lowndes (2002:97)

And third, with the above in mind, a more useful analytical framework could be assembled if constructivism and neoinstitutionalism could somehow be usefully blended together, thereby not only extending the framework to encompass elements of both international relations and political science theories, but also to take advantage of such a merger in the sense that they perform, as Hay (2002:28) notes, very similar roles anyway, and to therefore more effectively calibrate different aspects of the analysis.

The notion of the ECB as being a unique institution is rarely seriously challenged, and that it is also contained within an EU, itself also recognized as a *sui generis* institution, means that any state-focused or governance models are analytically insufficient by their very nature, and because the Eurosphere operates at both macro and micro levels, and bearing in mind the discussion above regarding traditional institutionalism and new institutionalism, it seems appropriate that a neoinstitutional level framework

would be appropriate. Figure 4 below illustrates the array of neoinstitutional variations, showing these positions moving left from the economic-quantitative boundary towards the political-qualitative limit on the right. Whilst it must be noted that each of these approaches do perform very differently in what they prioritise, are methodologically separate, and also acknowledging that they all have their strengths and limitations, they can all offer a different perspective on the operation of the Eurosphere, in the objects that they seek to explain, and in the causal mechanisms that they specify. Moreover, they can help to shed light on how membership of the Eurosphere affects member-states, the nature of intra-Eurosphere, and how member-states interact with the ECB and shape political and policy outcomes.

However, because the institutional approach in political science is complex and multi-dimensional (Hall and Taylor 1996), there is no one strand within the neoinstitutionalist range in Figure 4 that in isolation offers a wholly sufficient analytical framework. Each of the seven approaches in the array can be seen to perform differently in what they see as important, and are all characterised by their own strengths and limitations. In their separate ways they all potentially offer a different perspective on the operation of the Eurosphere, in the objects that they seek to explain, and in the causal mechanisms that they specify. In this way, the institutional approach helps to outline more closely the factors shaping how governments interact with the ECB in the Eurosphere and in what ways the Eurosphere shapes political and policy outcomes. For Dyson (2000) two of the neoinstitutional variants identified below appear particularly salient in relation to the ECB and the Eurosphere: sociological institutionalism and historical institutionalism.

Sociological institutionalism sees institutions as locations through which shared meanings are constructed, identities formed, interests shaped, problems defined, and actions framed. The Eurosphere is important in providing cultural effects by establishing certain standards of appropriate behaviour into which policy-makers are socialised, with consequent effects on discourse and action at the domestic level. Historical institutionalism differs in focusing on how institutional structures and processes lock in certain kinds of policy development over time. The Eurosphere is important in producing outcomes in the form of path dependent policy development. Its development is conditioned both by the historical circumstances of origin of its institutional structures and processes, which carry the experiences of past problems of economic stabilisation; and by critical junctures in its historical development, which

provide an opportunity for discontinuity in policy change. Therefore, both historical and sociological institutionalism place emphasis on the constitutive effects of structure. Institutional approaches can be divided for analytical purpose into those working top-down from a macro-political, systemic level of explanation, and those focused on a micro-political level. Macro-political explanation concentrates on how historical, cultural and sociological variables condition the operation of the Eurosphere and how its institutional arrangements affect states through internalization of certain norms.

Micro-political explanation in realist terms highlights the egoistic and calculative nature of actors and their strategic interaction in the pursuit of advantage as variables shaping how, and to what extent, co-operative behaviour takes place. Dyson (2000) argues for the primary importance of historical and sociological institutionalism in capturing the cultural effects of the Eurosphere in constituting how actors define their interests and give meaning to their use of power. This position does not deny the value of rational choice and game theory. It simply sheds its identification with a realist ontology that sees interests and power in individualist and material terms.

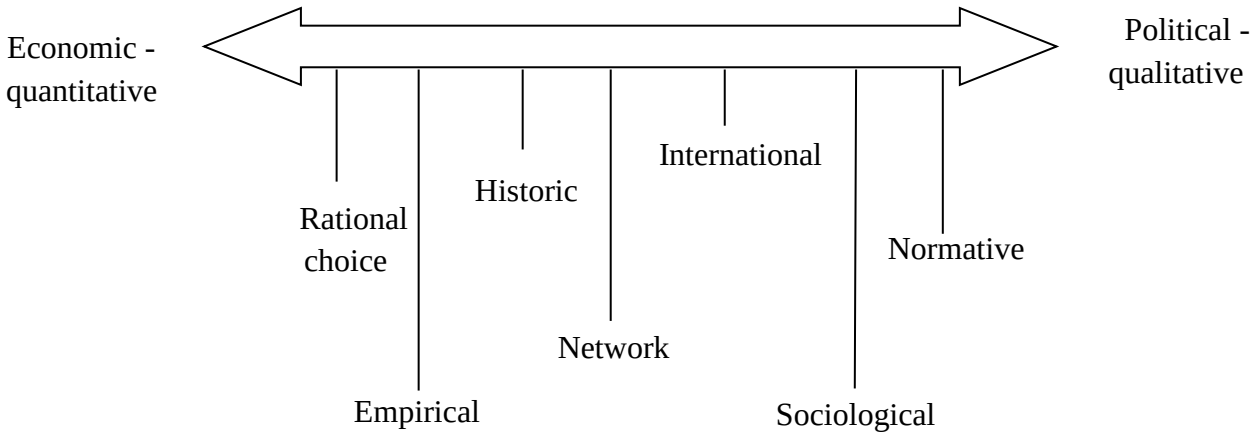
Moreover, it could be argued that Dyson's selection offers a clearly balanced flavour to neoinstitutionalist analysis, where, as Figure 4 illustrates, the historical variant can be seen to be positioned further towards the economic-quantitative pole of the spectrum, and the sociological approximately equally situated nearer to the political-qualitative end. However, while this makes sense in the context of this thesis, it is not wholly sufficient, and a third neoinstitutionalist variation is necessary. In conjunction with sociological and historical institutionalism, and consideration of the empirical nature of the main findings in Chapter 4, there is a clear need in this research to supplement Dyson's selection approaches with a third strand from the spectrum in Figure 4

Here, the empirical variation of neoinstitutional analysis is justified on the grounds that while recognising that Dyson's pairing does offer insights into both the political-qualitative and economic-quantitative aspects of the ECB and Eurosphere, the nature of the longitudinal and statistical datasets employed in this research also demand commensurate empirical attention, but whilst at the same time not giving way to the pure rational choice approach critically dismissed above. This analysis can be justified on the grounds of the need to be cautious when being heavily influenced through, and to a large extent, guided by, an overall constructivist-institutionalist framework that

disallows adequate attention the science part of the political science discipline from within which neoinstitutionalist approaches.

Figure 4

A spectrum of neoinstitutionalist variants



Source: derived from Peters 1999 cited in Marsh and Stoker 2002:96

And, as Hay argues that 'however tempting it may well be… to dismiss an empirical political analysis on the grounds that it aspires to a science of the political that is simply impossible… is a temptation we should resist' ((2002:252). And while the objects of natural science investigations always remain independent of the analytical process in a way which cannot be the case for social and political spheres, because the latter are inhabited by conscious and reflective agents who are capable of reversing their behaviour, often in the light of - and even in direct response to - the theories advanced by social and political analysts, there is no equivalent in the natural sciences. Matter cannot choose to disobey the laws of gravity (Hay, 2002). For the purposes of this thesis, at least the empirical attention given to the trajectories of Eurosphere and ex-Eurosphere member-states with regard to a number of variables, if nothing else offers a

descriptive basis for the development of analysis and understanding. Hay encapsulates this accordingly…

> For while it is important to retain a cautious, even sceptical, attitude towards the empirical indices we use and to be sensitive to the fact that many of our most significant explanatory variables do not avail themselves of quantification or simple measurement, description is the basis from which interpretation and explanation must build. Indeed, it seems fair to suggest that while political analysts are always likely to remain divided by the interpretations and explanations they offer of particular events or processes, they do have a rather greater chance of agreeing on the description of their subject matter. That entails the accumulation of empirical evidence. Thus, while empirical evidence alone is never enough it is an important and necessary starting point. (2002:252)

As the empirical evidence unfolds in Chapter 4, in both longitudinal and statistical analytic forms, the purpose then is to employ the empirical in line with Hays view, and to align it as far as possible with both the objectives of this research, and also with the philosophical and theoretical frameworks advanced. Therefore, the proposal is empirical within a neoinstitutionalist frame; but not wholly empiricist in nature.

The concept of a constructivist-institutionalism approach

From the above outlines of approaches, and given that the potential for an EU supracapitalism embraces both political science in relation to aspects of member-states as national capitalisms, and international relations theory is essential to understanding the creation and evolution of the ECB, and member-states' interconnectedness within the Eurosphere, it is clear that some form of a dual analytical approach would be instructive. Following the discussions above regarding selected elements of neoinstitutionalism performing the political science aspects of the required analysis, and that we can assume constructivist and neoinstitutionalist approaches also perform very similar tasks in their respective domains, it seems reasonable to adopt a form of bespoke constructivist-institutionalism for the purposes of this research.

As is discussed above, and endorsed by Dyson (2000), both sociological and historical aspects of neoinstitutionalism offer significant and balanced analytical utility while representing respectively both the political-qualitative and the economic-quantitative aspects of the neoinstitutionalist range of variants. Moreover, by adding an empirical frame to the mix, full advantage can be taken of the

neoinstitutionalist 'offer' of perspectives, not only as an important and necessary starting point, but also because the conduct and performance of national capitalisms as post-Bretton Woods units of analysis.

On the other hand, the rationale and associated justification for including any particular type, or types, of constructivist element in such an amalgam presents more of a challenge. This is due to both the broad spectrum of constructivisms referred to earlier, and also the contextual contingency of the subject matter being addressed here. In terms of the range of constructivism, both its scope and polarity are immediately problematic largely because of the very nature of constructivism itself. If it is accepted, in the most general terms, that constructivism is an approach to understanding international relations where reality is created by how actors perceive their experiences which, in turn, shapes the environment or context in which they find themselves; then two interrelated observations can be made. One is that the context that shapes actors' understanding must be a dynamic created by the actors as a result of ideas and perceptions, and also one that is, therefore, also shaped by actors. And two, in turn, these ideas and perceptions directly influence the design and building of the institutional architecture within which they will operate. However, this depends on the interpretation of the degree of 'purity' of constructivism deemed appropriate.

Returning to the idea of a constructivist continuum in Figure 3, the illustration is effectively based on the degree to which elements of neorealism are, or may be, assimilated into the analysis, where the left-hand extreme of thin constructivism, where 'thin' represents a weaker concentration of constructivist elements, with the contrasting 'thick' end denoting more constructivist ingredients than any other. At this outermost pole, reality is seen as being *constituted* in and through discourse and the exchange of ideas; with the position where reality is viewed as *represented* by discourse and ideas being located further to the left towards the centre ground and described as social constructivism. Social constructivism, as seen by Hacking (1999), is where subjects, objects, and processes serve to emphasise the contingent, fluid nature of the dynamics of social and political processes. This is particularly important where such processes are seen as by some as fixed, and thereby reality is static, and where the constructivist position helps us to perceive that things could and can be different. In this way, constructivism can be seen to attempt to restore politics and individual actors or agents to environments often held as fixed and unbending. In a normative sense, Hacking's version of constructivism can summarised by the present state of affairs of an object, subject or process being taken for granted as inevitable, but need not have existed in the first place, and as such, is neither determined by the nature of things nor is inevitable. If things are bad as they are, we would be better off either doing away with them altogether or at least 'radically changing them'. Positioned to the

right (perhaps somewhat contentiously) of social constructivism, and of particular salience here, a fourth position on the proposed constructivist continuum might be Ben Rosamond's (2005) social construction of the European economy. Not only does this treatment relate to both elements of the historical and sociological neoinstitutionalism advanced previously, but also offers up two very clear epochs in the discourses of European integration and the development of the European economy as a whole. Taking the period 1950 to 1984, Rosamond focuses on the advancement of integration, the 'legitimating myth' of European security, and the technocratic-functionalist governance methodology prevalent at this time. Then from 1985 to 2005, the foci switch to matters concerning the European economy and its competitiveness, transnational space, and now varying types of governance. While Rosamond's thrust is to 'problematize and think through the term the economy' as a social fact' and to consider an alternative to just thinking about the economy as a standard-materialist account of how it works; for example, rather than interpreting market behaviour through an economics lens, why not instead via sociology or historical lens?

Therefore, having briefly and generally located four relative constructivist positions on the continuum, and whilst also accepting that there are a number of other calibrational points between its polarities, we can firstly return to Wendt, and the thin end. The first thing to note here is that where it was argued above that the neo-functionalist versus liberal intergovernmental debate shifted to a contest between rationalism and constructivism around or just before the launch of the single currency, and that it appeared that elements of realist interpretation had also made the transition. Moreover, if we further accept that Wendt's thin constructivism, for whatever reason, either does similarly accommodate rationalist features, or at least does not wholly disallow them, then it is perhaps feasible in the practical sense to advance Wendt's constructivism as the international relations counterpart to the three-component neoinstitutionalist analytical structure previously forwarded. And, whether we accept that Wendt's view is at best a diluted, wide-ranging version of constructivism, or merely an attempt to assuage the mainstream rationalists commentators at worst; that he is a strong proponent of the power and importance of ideas in international relations whilst retaining elements of neorealist analytical utility offers much to the task of advancing the notion of an EU supracapitalism. The reasons for this are three-fold: the institutional uniqueness of the Eurosphere and the proposed EU supracapitalism; the pre-existing typology of the national capitalisms of the EU[10] individual units of analysis; and the ideas-based rationale of the EU's founding fathers. That the EU, and therefore by extension, its institutions, are unique means that there can be no analytical precedent to readily facilitate the setting

[10] Pre-existing or pre-given in the context of the timeframe of the thesis, where EU national capitalisms in 1986 were all to some extent, individually identifiable, although increasingly less so for the euro countries engaged in the single currency convergence programme from this time until 1999.

of this research. So, where can a form of constructivism be located that both complements the three strains of political science neoinstitutionalism already identified, and also offer a suitable analytical framework? Initially, we can return to Wendt.

Constructivist-institutionalism and the development of the Eurosphere

Beginning with Wendt's expansion of Mercer, (1995) who had acknowledged that at 'least in the European Union some states had managed to form a collective identity' (Wendt, 1999:242), it seems appropriate to look at a constructivist perspective of the EU in general, as a precursor to, and before focusing on, constructivism and the ECB and the Eurosphere. Identity is both an integral tenet of constructivism, and also a recurring central issue when comparing constructivism with rationalist approaches to the management and governance of the EU. Christiansen *et al* (1999) also present constructivism as the middle-ground approach to understanding EU management and governance in much the same way as Adler (1997), by separating rationalism and reflectivism; although Adler more specifically identifies postmodernism as the opposite pole to rationalism, with Christiansen *et al* preferring the more generic term of reflectivism which encompasses feminism, post-structuralism, post-colonialism, and critical theory. Moreover, Christiansen *et al* elevate the constructivist position to the top of a perceived triangle, thereby not only separating rationalism and reflectivism along a flat continuum, but by being positioned above these two approaches. It could be argued that this reflects its position as a more encompassing theory, in which rationalism and reflectivism are increasingly playing supporting roles. This is reflected in other fields of political science, notably in international relations where constructivism became a very popular theory following the end of the Cold War. Drawing further on Christiansen's (1999) research, his situation of constructivism is important as relating to everything between rationalism and reflectivism (1999:536). However, there is an alternative interpretation to the understanding offered by Christiansen. Instead of perceiving the constructivist position as a cantilever bridge, it could be argued that constructivism is actually drifting away from rationalism and towards reflectivism, stretching the links to the former whilst absorbing the latter. Despite that it would be wrong to claim the two are poles apart, a more accurate image would be an expanding constructivist canvass converging on a static rationalist pole.

So where does constructivism offer advantages over rationalism in terms of its analytical capabilities? First of all, the rationalist stress on fixed preferences invites constructivist

criticism (Schmidt, 2002; Checkel, 1998). Understanding the decision-making processes of the actors involved in the EU is crucial to uncovering the motivators that influence governance and, here, the rigid structure of rationalist analysis will never shed new light on EU governance. The problem is two-fold. Firstly, these fixed preferences vary depending on which rational choice advocate is writing. Whether it be Hoffman's (1966) predilection for safeguarding sovereignty, or Moravscik's (1998) interest in economic security, a significant aspect of rational choices ideological cornerstone is ambiguous. Secondly, this reliance on fixed preferences suggests fixed outcomes dependent on the variable structure. This is to be expected from an explanatory tool that relies exclusively on material ontology for its foundations. In conjunction, these characteristics present a skewed version of reality and a confused theoretical framework. Schmidt (2002) acknowledges the adoption of some flexibility in preferences. However, this is unable to address the larger issue of rationalism, failing to not just explain, but to understand institutional change. Constructivists like Checkel (1998) suggest a change in formula to enhance understanding of institutional development.

A constructivist-institutionalism challenge to the neoclassical view of the function of national capitalisms

One of the underpinning themes of this research is the proposition that the ECB is advanced as both the key economic agent, and by extension, the man political actor in the concept of an EU supracapitalism. However, any meaningful assessment as to the extent to which the ECB will be able to successfully manage the Eurosphere as a supracapitalism depends on how its managers understand the function of national capitalisms in general and the role of money in particular. This is of central importance to the main claims of the thesis, and an issue that calls upon the power of ideas and discourse. And here, the thick end of the constructivist range offers up an opportunity to consider national capitalisms from a completely different perspective to that of mainstream observers and commentators. In the same way that Rosamond (2005) asks us to think about the European economy as an imagined 'economic space', Gerard (1989) argues that national capitalisms should be viewed in a completely heterodox fashion. In doing so, he contests the commonly held ideas that supply creates demand and that money is exogenously neutral. Indeed, for Gerard it is the opposite case for both understandings. Gerard builds a comparative framework to contrast the generally-accepted market exchange version of a national economy with that of a monetary production model. These ideas are more expansively explored in Chapter 6, but the following passages offer a summary of the main ideas.

The theory of a market exchange economy and the theory of a monetary production economy provide two theoretical conceptions of the nature, characteristics and operation of the contemporary capitalist economy, or national capitalism. They originate in two alternative frames of reference, embodying entirely different sets of assumptions as to the nature of national economic order. The theory of a market exchange economy has been developed by the followers of neoclassical theory, the dominant approach in economics. Neoclassical theory views all economic phenomena as being within the *allocative* mode of activity[11]. The theory of a monetary production economy, on the other hand, offers an alternative perspective, inspired by Keynes's *General Theory*, which recognizes the existence of non-allocative forms of economic behaviour *alongside* allocative behaviour. The theory of a monetary production economy attempts to move beyond the neoclassical allocation-misallocation duality by recognizing the existence of other dimensions of economic order. In particular, prices and quantities are no longer seen to be determined simultaneously in an allocative process with the outcome depending on the prevailing structural and informational conditions. The monetary production economy approach allows for some prices and quantities to be determined quite separately in non-allocative processes.

These differences in the presupposed notions of economic order lead to very different views as to the operation of national capitalisms. In a macro-exchange economy, equilibrium outcomes are determined, ultimately, by the supply side, and in particular, towards full-employment equilibrium; while the allocative mechanisms on the demand side ensure that there is sufficient aggregate demand to maintain the full-employment level of aggregate supply. However, in a monetary production economy, the macro equilibrium is determined by the demand side. The multiplier process determines the flow of aggregate demand, which, in turn, determines the rate of the productive flow and, hence, the current level of employment. There is no reason why the demand side in a monetary production economy should move towards generating a rate of monetary flow consistent with the full-employment rate of the productive flow. Therefore, at the macro level, a market exchange economy and a monetary production economy explain opposite causal sequences. In the exchange economy, the supply side determines the demand side, this causal sequence being summed up by Say's Law, where supply creates its own demand. In a monetary production economy, the causal sequence is inverted, with the demand side determining the supply side; that is, demand creates its own supply.

[11] The ECB's published benefits of price stability are all based on the allocation of resources, with non-allocative resources almost completely overlooked (ECB, 2004:42)

Another fundamental difference between the two economies lies in the opposing views regarding the nature of money. In a market exchange economy the quantity of money is exogenously determined. It is a parameter of the system under the control of the central bank. As the supply of money changes, this initiates an allocative process within the exchange economy with equilibrium being restored through adjustments in the aggregate price level (as captured in the quantity theory of money) and the rate of interest (as captured in the theory of liquidity preference). It follows, therefore, that in a market exchange economy the quantity of money ultimately determines the rate of flow of money income. The quantity of money is the crucial exogenous variable determining, in turn, the aggregate price level and the rate of monetary flow.

In a monetary production economy, however, the causal direction is again inverted. The rate of the monetary flow depends on the *separate* socially interactive processes which determine the aggregate price level and the rate of the output flow. It is the rate of the monetary flow which determines the quantity of money required. Unless the central banks impose money supply restrictions, money is always automatically created within a monetary production economy through demand by households and firms. Money is the medium for exchange, and the quantity of money is entirely demand-determined, not demand-determining. Monetary production economies possess the potential to create the necessary monetary means for conducting transactions. The actual amount created depends on the rate of monetary flow. It is this separation between the potential and the actual which makes the quantity of money both a theoretical, and empirically challenging, concept. From a non-neoclassical perspective, the idea of some exogenously-determined supply of money is merely an ill-founded assumption arising from the neoclassical view that a national capitalism behaves as if it is a market exchange economy.

The difference in the nature of money in the two economies is most apparent over the issue of the neutrality of money. In a market exchange economy, the all-important equilibrium outcome is full employment, regardless of the prevailing monetary conditions. Money is neutral, and therefore has little influence regarding any movement towards such an equilibrium level. This neutrality is the logical implication of the neoclassical assumption that money is a non-essential aspect of the context of economic behaviour. The theory of a monetary production economy starts from the entirely opposite position: that is money is an essential aspect of the context of economic behaviour, giving rise to varying patterns economic behaviour. Far from being neutral with respect to real economic variables, it is the monetary context which shapes the behaviour patterns that, in turn determine output, and

therefore adjustment in employment levels. Neoclassical theory assumes the neutrality of money in all economic behaviour. As Gerard (1989 argues) … 'it is then unsurprising that an analysis which assumes that money is peripheral, should ultimately arrive at the theoretical conclusion that money is indeed peripheral' Gerard continues.

> What is remarkable is the failure on the part of the followers of neoclassical theory to admit that the 'discovery' of the neutrality property is little more that the uncovering of their own, still unacknowledged, assumptions. Logical analysis is, after all is said and done, only a set of rules and deducing the implications of what has been assumed in the first place. Change the premises and the implications are likely to change. The neutrality property of money is entirely the result of a particular restrictive assumption adopted by neoclassical theory. (1989:6)

The monetary production economy offers the opportunity to move beyond the limitations and constraints of the neoclassical frame of reference in three ways. First, the neoclassical system should be considered as a theoretical system founded upon a restricted, perhaps distorted, view of human behaviour within national capitalisms. If this methodological flaw is accepted, then neoclassical economic theory can no longer be held as generalisable. Second, the neoclassical frame of reference is predicated on the perception that all economic phenomena are situated entirely within allocative modes of economic activity. This positions markets, and therefore market mechanisms, at the centre of all economic operations, and, in doing so depends on the choice-theoretic, market-theoretic, and equilibrium-theoretic explanations of how a national capitalism operates. Moreover, that these three accounts are very tightly interrelated, or more precisely, wholly interdependent, means that they must stand or fall together. Any movement beyond any one of the components of this theoretical framework automatically necessitates a movement beyond all three. That there is this almost complete dependence on the allocative explanation of the workings of national capitalisms, and the 'house of cards' relationship between all three components, suggests that at the very least, alternative conceptual approaches should be considered. Moreover, a move beyond neoclassical explanations allows economic theory to become liberated from the constraints and limitations of the allocative-exclusive framework, and therefore more readily generalisable than when locked in to 'any one set of presupposed notions of order' (Gerrard, 1989).

Third, and as introduced above, is the question of the role of money. The neoclassical view is that money is both exogenous and neutral in the workings of national capitalisms. However the capitalist economy is characterised by the interface between the production of goods and services and the patterns of behaviour that firms and individuals are directly related to, and are therefore expressed in monetary terms. Different economic actors' actions and reactions in relation to money, money flows, and money-income, differ at separate and discrete temporal junctures, and also according to a whole range of rational and irrational socially interactive characteristics, and therefore in this way have a direct bearing on the quantity of money required in the economy at any given time. Effectively, these temporal and socially interactive dynamics form the basis for the requirement for differing amounts of money, and that in this way money is centrally demanded, and therefore supplied in different responses to this demand. The neoclassical view holds that the introduction or withdrawal of money is an exogenous (sometimes policy driven), neutral action, and is only employed as an agent to manage, or control, the behaviour of economic actors within the national capitalism. In essence, for neoclassical theorists, money is not only non-central, but is non-essential, and only usually employed to reflect the price-multiplied-by-quantity expression of market activity outcomes

The monetary production view of the capitalist economy follows a broader explanation of economic phenomena in general, and the workings of national capitalisms in particular. Central to this explanatory framework is the view is that the behaviour patterns of households, firms, and individuals differ significantly from those to be found in the neoclassical exchange economy. It is in this way that non-allocative modes of economic activity may be considered alongside allocative modes of activity, and thereby broadening the scale, scope, and utility of economic analysis at national, regional, international, and transnational levels.

Neoclassical theory assumes that all economic activity is bounded within a market theoretic context of behaviour. In this way it bounds neoclassical theory within an 'allocation-misallocation duality' (Gerrard, 1989:38). In this view, all observed economic outcomes are seen to fall into one of two mutually-exclusive categories: perfect allocative equilibrium or imperfect allocative equilibrium; with imperfect allocative equilibrium being a misallocation of resources owing to the existence of either informational or structural imperfections, or both. The suggestion here seems to be that it is only the market-theoretic view that represents 'real' economic behaviour, with monetary flows only playing a subordinate role in determining real variables when the exchange economy falls into disequilibrium. The

monetary sector is treated as a discrete entity within which the demand for money equals the supply of money, and is therefore a purely automatic and self-balancing allocative mechanism. The view that money is non-essential is one of the most important limitations to the neoclassical understanding of national capitalisms. In a monetary production economy however, economic behaviour is taken to manifest itself *within* a monetary context.

My argument here follows one particular path towards a more general heterodox, understanding of economic phenomena. The point of departure is the notion that the monetary dynamics of a national capitalism significantly affect the nature of behaviour patterns of firms and households. In this way a national capitalism is characterised by the production of commodities in a 'monetised' economy. The conjunction of these characteristics creates a monetary production economy in which the behaviour patterns of firms and households differ in significant ways from those to be found in a market exchange economy. And, it is this fundamental assumption which allows us to consider the equally important role of non-allocative modes of activity *alongside* the allocative aspects of national economies.

Summary

These passages have endeavoured to lay down a constructivist-institutionalism perspective for considering national capitalisms through ideas and discourse, and that together advance a heterodox view of how they may be seen to function. In the context of EU national capitalisms, the combination of three neoinstitutionalist variants and four constructivist positions serve to pave the way for the following chapter that proposes a set of typologies of EU national capitalisms, and for an extended evaluation of the ECB's evolution and performance on managing the Eurosphere in Chapter 5.

Chapter 3 An analytical typology of EU national capitalisms

Overview

In support of the principal arguments of the thesis, the purpose of this chapter is to build an analytical framework for measuring and testing selected empirical data relating to the macroeconomic trajectories of EU national capitalisms between 1986 and 2006. In doing so, there is both a return to further elements of the varieties of capitalism literature and accompanying commentaries, and also the development of a related theoretical framework from which to achieve a number of empirical objectives. Consequently, the purposes of the subsequent analysis are fourfold: to identify pre and post-euro longitudinal macroeconomic patterns; to quantitatively assess the impact of the ECB's supranational management of the post-euro national capitalisms; to contrast and compare the euro economies with the non-euro EU economies, and to derive from the dataset a time series projection of potential future trends.

Such a proposed analytical construct immediately offers up two ready-made, discrete groups of similar scale and scope: the euro and ex-euro; with 12 capitalisms in the former and 13[12] in the latter. And, with these comparisons alone it could be posited that this type of dualistic framework would be sufficient. Indeed, analysis at this level can reveal significant outcomes as can be seen in Chapter 4, especially in terms of a primary assessment of the Eurosphere capitalisms' behaviour, and the effectiveness of ECB's supranational management. Nonetheless, although this analytical parsimony has its merits, there would also be many missed opportunities, particularly in relation to the comparative dynamics of individual national capitalisms over time, and potential contingent clustering under certain conditions. Moreover, the ultimate tests of the ECB's potential to successfully oversee the development of EU supracapitalism will be the extent to which it can effectively regulate 12 different national capitalisms, each with their own socio-cultural and politico-economic historical trajectories. These individual pathways again highlight one of the recurring issues of this research: to what extent can n=1? Put another way, under which conditions and in what circumstances can all the 12 euro capitalisms function in an externally-managed co-ordinated fashion? Here, levels of convergence of certain post-single currency macroeconomic indicators are one way of assessing the degree of supranational influence the ECB may

[12] It should be noted here that all acceding member countries from the 2004 enlargement, do so on the basis that they will automatically join the euro at a pre-determined date set by the EU, and there is no longer an opt-out as in previous enlargements

exercise over the Eurosphere capitalisms; and, for that matter, to also assess any spillover effects upon those EU capitalisms still retaining their domestic currencies. And, by extension, this is of particular importance in gauging the wider implication of the potential for an EU supracapitalism. This leads to the questions of why and when would it be necessary to typologise the EU national capitalisms?

However, before addressing these questions, it is worthwhile introducing the idea of contextual contingency. This originates in the constructivist approach in general, and perhaps positioned somewhere between Hacking's Social Constructivism and Rosamond's European Economic Space, in particular (See Figure 3). That is, any particular typology can be seen as socially constructed or as being located in a particular space, and possibly within a particular set of discourses. The logic of the concept flows from the type of analysis being undertaken, and rather than accept the subjects for analysis as being pre-determined, or 'givens', as in in the neorealist sense, the subjects can be organised in such a way that analytical utility is maximised for a particular purpose or set of ideational objectives. This is of special significance here as EU national capitalisms, by way of being both asynchronous as units of analysis in the sense that there have been five enlargements of membership from 1958 to 2004, each with its own specificity; and also that they do not naturally fall into any convenient statistical categories.

So, to return the questions of why and when would it be necessary to typologise EU national capitalisms, it is perhaps intuitive and also initially instructive to expand on some of the varieties of capitalism literature introduced in Chapter 1. Following this, subsequent passages in this section explore a theoretical framework which builds on the above literature by introducing some elements of comparative political economy alongside the concepts national preference and path dependency, before advancing a justification for the particular typology employed to analyse the empirical datasets in the next chapter.

Potential typologies of EU national capitalisms

At this point, and continuing with the notion of contextually contingent typological constructs, it may be useful reflect on some of the potential combinations and permutations of national capitalism typologies relevant to, and pre-existing within, the EU. For example, following on from Hay's critical examination of the *Varieties of Capitalism* text, the EU could be viewed through another dual lens by separating all the 25 member-states into either liberal market economies (LMEs) or co-ordinated market economies (CMEs), but perhaps

with the contingent need to recalibrate or re-interpret both. In *Capitalism Against Capitalism,* Michel Albert's post-Cold War narrative introduces us to 'Rhine Capitalism', where, in the EU context, Germany and the Benelux countries are put together to identify a form of social capitalism seen in direct contrast to the Anglo-American model of shareholder-maximisation (Albert, 1993). The well-being or welfare of mass publics' perspective would align with Esping Andersen's three-way, *Three Worlds of Welfare Capitalism*, and with it a sociological-cultural neoinstitutionalism. *The Seven Cultures of Capitalism* by Hampden-Turner and Trompenars (1994) offers a socio-cultural perspective that would offer opportunities to explore historic, international, and sociological variants of neoinstitutionalism. Another way of classifying the array of EU national capitalisms may be to adopt a geo-strategic framework, where it would seem logical to bring together, for example, Estonia, Latvia, and Lithuania as a Baltic system where such a politico-economic combination may be viewed from a historic (and perhaps network) neoinstitutionalist perspective. In much the same way, Belgium, the Netherlands, and Luxembourg have long been associated together as the Benelux countries, which were, of course, a trading group that was effectively a substructure of the original six members of the EU, which itself, in turn, could also be considered as a grouping of national capitalisms, in the network-international sense of neoinstitutionalism. Rhodes (1997), among others, has also described the potential for analysis of a 'Mediterranean' form of capitalism that would align Greece, Portugal, and Spain in similar fashion.

Finally here, there is also the special case of the Nordic model of capitalism, a notable and influential typology that emerged following on from the early work of Titmuss (1958) regarding the welfare state, and from where Sweden, Denmark, and Finland were often grouped together as a regime cluster characterised as a group of international welfare states with a shared social democratic consensus. These ideas attracted a considerable amount of literary and critical attention up until the mid-1990s, and which was largely synthesised by the above-cited work of Esping-Andersen in 1990. However, following the deep recession of the mid-1990s, a very public criticism of the model was initiated by the work of Anthony Giddens, and his New Labour-inspiring 'Third Way' insights, where he suggested that the Nordic model was an outdated form of 'traditional' social democracy which was incapable of dealing with the contemporary 'realities' of technological change, globalisation, and 'post-industrial risk society'(Giddens,1998). Moreover, even though the suggestion by Hall and Soskice (2001) at that time that *any* overall neoliberal convergence had been overstated, it

appeared then that the Nordic model had been effectively collapsed into another regime cluster, a form of co-ordinated market economies, and one which is based on a type of Christian Democratic capitalism. Fortunately for some observers, any degree of convergence into any typology as a consequence of post-Fordism, post industrialism, globalisation then came under close scrutiny from Hay (2003a, 2003) among others, who championed the notion that there is indeed still case to be made for consideration of whether the Nordic social model may provide insights about prospective alternatives in contemporary neoliberal times. Moreover, with the *prima facie* empirical evidence of the early part of the 21st century suggesting both a re-stabilisation, and even a superior economic performance in the Nordic region, there is at least reason enough for the continuing analytical utility of the model.

Similarly, a temporal analytical structure would bring together those other EU capitalisms that joined the original six members at different times, and would therefore have comparable time-series trajectories. Denmark, Ireland, and the UK in 1973; Portugal and Spain (as perhaps also 'Iberian Capitalisms') in 1986; and the joint accession of Austria, Finland, and Sweden in 1995 could also be an illustration of this type of approach. In this vein, the American economic historians, Larry Neal and Daniel Barbezat, consider the Benelux countries alongside Denmark as a grouping; Ireland, Greece, Portugal and Spain together as the 'First Outsiders'; and Austria, Finland, and Sweden as 'Part of the Outer Circle That Joins In'. Each of these collectives are worthy of brief description.

Firstly, the Benelux countries have several features in common with Denmark, and which Neal and Barbezat (1998) argue justifies treating these four countries as a group. They are all small, both in terms of land area and population; they are all approximately constitutional monarchies, although Luxembourg is really a duchy; they are high-income economies; and all do most of their trade with Germany. And, with respect to EU matters, given their common interests, tend to vote as a bloc on strategic issues. It is also within their interests to maintain continued access to German markets. However, it also the case that with external EU issues they are often divergent in their perspectives as a consequence of strong differences in their history and language. Each has also been historically vulnerable to international conditions relating to trade, capital movements, exchange rate fluctuations, and immigration flows. All four were forcibly occupied by Nazi Germany during World War Two, and it appears natural to assume that each would insist on exercising a political peacetime influence on the EU, that is perhaps greater than their small size warrants. Neal and Barbezat continue this line of reasoning.

> This also explains the energy with which their political leaders pursue initiatives that will deepen the economic and political union of a larger Europe that encompasses, and perhaps contains or even controls, their powerful neighbour. (1998:275)

Secondly, another gang of four, the 'First Outsiders', Ireland Greece, Portugal and Spain, can all be considered to have originally been on the geographic periphery of Europe, and were also late joining the then European Economic Community (EEC). All four were relatively poor countries linked by both their former agricultural-economic profiles, and the drive to industrialise and modernise their economies alongside the more advanced economies of the then existing members of the EU. It is their original common poverty that brought them together as a voting bloc, and has enabled them to attract an increasing share of the EU budget in the form of regional development funds, and more latterly, cohesion funds largely finance by contributions from the richest member-states. Membership of the EU has helped them re-evaluate their economic strategies, so that a consensus development programme evolved amongst them. By radically changing policies, Ireland has seen a significant rise in its *per capita* income; although Greece by not radically changing its policies has significantly limited the growth in its own *per capita* income and remains well below the EU average. However, the experiences of both Ireland and Greece generally hold out a large measure of encouragement for policymakers in other backward countries that selecting the right policy mix cam make a difference. This is particularly salient with former Eastern Bloc economies such as the Czech Republic, Hungary, and Poland having the opportunity to learn the lessons learned by these earlier arrivals into the EU.

In addition to the above linkages, the Iberian countries, Portugal and Spain also share a southern European location, joined the EU at the same time, and were both subject to fascist dictatorships for 30 years after the Second World War (Neal and Barbezat, 1998). And, they were also both neutral during that conflict, although Portugal was favoured with Marshall Plan aid and Spain was not. Portugal has a largely a very similar economic and political history to that of Spain, and has mainly anticipated events in Spain by a few years.

Finally, Austria, Finland, and Sweden are collectivised by Neal and Berbazat as 'Part of the Outer Circle' that has joined in. On January 1st 1995, the three countries joined the EU as the 'fourth expansion'. These three countries, all members of the Organisation for Economic Co-operation and Development (OECD) and the European Free Trade Area (EFT), are all small,

open economies, the bulk of whose trade had been with the EU countries from the early 1960s, but now significantly with Germany as their main trading partner. They had all decided to be part of the EU decision-making processes, rather than continuing to accept whatever terms and conditions the EU decided were appropriate for economic relations with them. Neal and Barbezat, (1998) explain.

> In other words, they were not satisfied with the terms of the European Economic Area (EEA), which had been dictated by the EU. The decision to join took as long as it did because each of the three had carefully a neutral position between the US and the Soviet Union. None of them belonged to North Atlantic Treaty Organisation (NATO) or the Western EU (WEU), the two military alliances for Western Europe. With the collapse of the Soviet military threat, however, all three felt that their neutral status would not be jeopardised by joining the EU. (1998:321)

All three were welcomed as valuable members of the EU, both as relatively well-off countries, and also enjoying highly developed economic relationships with the West, as it was then referred to. Some reluctance was demonstrated by their farmers, who would receive lower subsidies under the EU's Common Agricultural Policy (CAP), although they were all allowed to top up the EU's support payments over a transitional period of several years. And, although some resistance was also demonstrated by the poorer, peripheral countries discussed above, who were afraid of being outvoted on issues dealing with regional aid to backward regions of Europe, this was overcome when the new entrants agreed to add to the cohesion funds of the EU as well as paying subsidies to their own farmers.

All of these combinations, and potentially more, are contingent in that they all based on a variety of politico-economic, geopolitical, and geo-strategic relationships, and these connections are contextually framed. The argument here is that varieties of national capitalisms, in the general sense, are established or identified for a variety of developmental and institutional reasons, and as such are usually analytically-comparative in nature.

Hay (2004), both adds weight to this contingent argument, whilst also adding a tentative footnote to the varieties of capitalism debate, when considering the concept of potential dual convergences of types of capitalism via the extension of LMEs and CMEs into forms of social democratic corporatism and market liberalism.

> Arguably the identification of *dual* convergence owes much to the distinctive counterpoising of *liberal* and *co-ordinated* market economies as varieties of capitalism…or, by extension, *social democratic corporatism* (SDC) and *market liberalism* (ML) as varieties of partisanship (Garrett, 1998). It is surely tempting to suggest that had a greater number of initial clusters been identified a rather more complex pattern of convergence, diversity and/or divergence might also have been identified. If dual varieties of capitalism (or partisanship) lead to dual convergence, then might not triple varieties of capitalism lead to three-fold convergence, quadruple varieties of capitalism to four-fold convergence and so forth? (2004:238) (original emphasis)

In ways similar to those discussed above, the national economy of Germany, say, could be analytically linked to Austria, the Netherlands, and Poland on geopolitical and socio-cultural bases; or to France, in terms of an intra-Eurosphere politico-economic alliance (as in the Stability and Growth Pact established in 1998). Therefore, by extending the geopolitical structure of the EU, and expanding its many and varied politico-economic, social-cultural, and historico-sociological influences and relationships through a neoinstitutionalist lens, a whole range of analytical permutations present themselves, and the n=1, n=2, n=12, n=13, or n= 25 varieties of capitalism question becomes less of a problem, and more of a set of analytical opportunities.

In earlier passages of this thesis it is suggested that clearly defined temporal and spatial starting lines are required to facilitate multi-layered analysis. This is considered appropriate as member-states were, for the first time, collectively exposed to a new, omnipotent type and level of EU supranationality, and had been subjected to a very clear and rigid temporal schedule of politically and economically challenging, predetermined macroeconomic indicator targets leading up to the launch of the euro in 1999. In order to take these typological ideas towards a justifiable categorisation for the proposed analysis here, support can be found in certain elements of comparative political economy, which are offered below.

Comparative political economy

In this regard, the works of Esping-Andersen (1990), Arend Lijphart (1971), Ellen Meiksins-Wood, Jonas Pontusson (1995), and Susan Strange (1997) are drawn upon to apply elements of the comparison method in relation to the national capitalisms both within and between their prescribed typologies. Lijphart (1971:690) stresses that the comparison method and

comparative politics are by no means coterminous, that is, that other methods can clearly be employed in comparative politics and the comparison method is also applicable in other fields and disciplines.

However in the study of comparative national capitalisms, especially within such clearly defined spatial and temporal boundaries as the EU, the comparison method offers opportunities to identify concomitant variations[13] as opposed to simply comparing instances when a phenomenon does occur with those instances when the same phenomenon does not occur (Lijphart,1971:687). Three particular aspects of the comparative political economy approach appear to be relevant in order to facilitate the identification of key variables and make necessary comparisons of the capitalisms of the EU: the method of difference, the method of similarity, and preference theory

In order to use the method of difference as an effective analytical tool in the examination of the national capitalisms of the EU, it is first necessary to identify the key variables of, and within, those capitalisms, and then to compare them. These variables distil into three levels of analysis: the macroeconomic rationale, the major components of national capitalism, and the individual nation-states' path dependencies.

The method of difference.

The identification of key variables then can be regarded a pre-requisite to employing the elements of the method of difference. In addition, the recognition of the three levels of variables illustrates overlaying capabilities where national capitalisms' similarities and contrasts can be viewed simultaneously.

The method of difference itself has two strands that can be used to consider the capitalisms of the EU. The first of these, the area approach, contributes to the comparison method by considering 'the cluster of characteristics' (Lijphart 1971:688) that geographical areas tend to have in common and therefore can be effectively used as controls. The area approach is by no means confined to proximate, physical similarities. An inductive study by Russett (1968) shows how 54 socio-cultural variables of 82 countries have similar socio-cultural groupings of countries which correspond to regions or areas. Also, the statistical work of Au (2000),

[13] Concomitant variations as employed here are those variables that are shared by, or accompany groups of EU capitalisms compared to others that may be control groups, or whose variation cannot be explained.

which examined the intra-cultural variations of 42 countries, 13 of which were EU member-states, illustrated similar area likenesses. These studies suggest that although comparability is not inherent in any given area or region, it is more likely so than in a randomly selected set of countries.

Within the geographical area of the EU there are a number of these groupings that may occupy such various politico-economic sub-spheres. The Benelux countries provide an example of such a geographical grouping that share similar socio-cultural and politico-economic characteristics. The Scandinavian countries within the EU; Denmark, Finland and Sweden as a collective, offer both the means of a control and various comparisons, i.e. the area similarities of geography and culture, whilst differing politico-economic positioning places; Finland within the Eurosphere, and Denmark and Sweden outside; but with all three adopting the CME variation of capitalism[14] Similarly, Greece, Portugal, and Spain are considered to be not only 'southern' European countries, as in this thesis, but also share, along with Ireland, an economic grouping as the poorer members of the EU. Portugal and Spain whilst being members from the above group, also represent a geographical sub-group; that of the Iberian Peninsula. Both, as discussed above, emerged from decades of dictatorship in the 1970s (alongside Greece, to form a "cluster" of southern European Economies), (Fishman, 1990:422-440), and they are also allies in North Atlantic Treaty Organisation (NATO. However, they have different languages and cultures which sets them apart, perhaps in a similar way to that of England and Scotland or Wales in the UK. France and Germany, which are considered to have formed the original political axis on which the EU has been constructed and developed, provide a contrasting example of how area comparison may be employed at the meta level. It is argued, as in *The Economist* (Feb.6th 2003), that it is the differences between France and Germany that constitute such an axis. Germany is Europe's leading industrial power, France is its leading agricultural producer; France is mainly Catholic, Germany is mostly Protestant; Germany wants a federal Europe, France believes in the nation; Germany straddles eastern and western Europe, France borders both northern and southern Europe. By contrast, the UK and Ireland, whilst being respectively outside and inside the Eurosphere, and remain arguably distant from each other in socio-cultural terms, align closely around a specific politico-economic version of capitalism, the Liberal Market Economy (LME) model.

[14] Soskice in Kitschelt *et al*, further differentiates CMEs into industry group types.

Lijphart (1971:689) develops this theme by considering intra-nation alongside inter-nation considerations. An example of this could be found in the comparison of say, Germany and Italy. Smelser in Lijphart (1971) suggests.

> …For many purposes, it would be more fruitful to compare northern Italy with southern Italy, and the Ruhr with Bavaria, than it would be to compare Germany as a whole with Italy as a whole. These two countries differ not only in the level of industrialisation, but also in cultural traditions, type of governmental structure and so on. Lijphart (1971:689).

The advantage of intra-unit comparison is that inter-unit differences can be held constant. Smelser in Lijphart continues.

> …Then, having located what appear to be the operative factors in the intra-unit comparisons, it is possible to move to the inter-unit comparisons to see if the same differences hold in the large. (1971:689).

This intra-inter approach is particularly applicable to the contemporary positions held within the EU in relation to both geographical clusters and the politico-economic sub-spheres member-states occupy.

The intra-inter approach can be extended to other levels of area analysis. Such an extension can be found in relation to the EU in Dicken's seminal work *Global Shift*, where the macro, micro and meso scale perspectives of the European region in general, and the EU as a part of that region in particular, are considered in terms of the interdependencies between, and the collective behaviour of, economic regions. The 'Golden Triangle' of Europe being such an example (Dicken, 1998)

The second variant of the method of difference is a diachronic analysis of a single country or group of countries. Such a comparison of the same unit(s) at different times offers a generally preferred solution to the control problem than comparison of two or more different but similar units in the same area at the same time. This is of particular use when considering the developing EU polity in relation to member-states by fixing a departure point in time as a base year, such as the launch of the euro, in 1999, and comparing their trajectories relative to both sides of such a base year. This may also be helpful for comparing the EU timetable for political and/or economic union and the current spatial domains inhabited by the member-

states at varying times. In particular, use is made of the diachronic method below when examining the asynchronous patterns of economic and political convergence. The diachronic method can also be applied to the EU in terms of what may be described as temporal groupings. This may be considered an alternative way of searching for comparisons and similarities between groupings of EU member-states.

This approach to the comparison method not only allows an assessment of the varying degrees to which member-states are moving towards, or away, from the Euro supranationality, but also a gauge with which to measure the level of transfers of independence from their national capitalisms (if any) to relative dependencies on the supranational capitalism of the EU. To this end, there is a ready-made economic 'laboratory' to conduct tests; that which comprises the 12 capitalisms that have been situated within the Eurosphere since 1999. There is also a set of default controls against which to test any such transfers; the three non-Euro countries. On the other hand, as yet, there appears to be no obvious *political* laboratory available at present to conduct similar experiments. However, certain key political assumptions may be drawn and used in comparative analysis. These may include, for example, the extent to which member-states exert their political influence outside the constraints of economic and monetary union (EMU), say when forced into using fiscal policies which conflict with EMU, like the flouting of the 3 percent of GDP budget deficit rule of the Growth and Stability Pact.

The method of similarity

Whilst the comparison method has been hitherto employed largely in attempts to highlight differences between nation-states, there is also a need to consider similarities. Susan Strange employs a horticultural analogy to capitalist diversity.

> Given that the seeds of a capitalist mode of production grew to maturity in very different gardens, and evolved under the hand, as it were, of very different gardeners, within very different cultures and social structures, and under the influence of very different state laws, constitutions and policies… (1997:182)

Strange continues to argue that comparative social scientists are misnamed in that they do not compare nearly as much as they contrast. Their attention is mainly directed at the differences between states, or economies or societies, rather than at their similarities.

> They are asking how states or societies differ, and why they differ. For example, the study of neo-corporatism has centred on why neo-corporatist practices in Austria, The Netherlands, or Sweden differ from each other. They seldom appear to inquire why is it that all these states have adopted broadly similar system-sustaining policies and institutions at about the same point in their social, economic and political development. (1997:183)

This perspective is applied in the following chapter when the sub-spheres are analysed; as it is the social, economic, and political similarities between them that membership of the Eurosphere sometimes reveals. A return to the above France-Germany comparison adds some support to Strange's argument. Although numerous contrasts are readily identifiable between the two, a number of similarities can be found in their political trajectories. An example of this can be found in the *Economist's* article regarding 'A co-ordinated kick-start?' of the German and French economies.

> … It may be coincidence that Messrs Schröder and Raffarin, leading centre-left and centre-right governments respectively, are adopting a similar approach to reviving their economy. Or is it a more co-ordinated stand?
> Officially, no. But the two governments have recently been working closely on other matters, from Iraq to farm reform. "There's a clear sense that France and Germany are moving side by side on economic co-ordination," says a French official. If so, no need to worry too much about the penalties for breaching the Stability Pact. "Since last week, a clear Franco-German strategy has emerged: to pursue structural reforms and cut deficits only after, when growth resumes," says Jacques Delpha of Barclays Capital in Paris. “This entails each voting no to fines against the other." (2003:39)

The need to seek out common trajectories *and* variations is developed by Pontusson (1995), who argues that this is at the core of comparative politics.

> Comparativists often shirk this challenge by focusing on exclusively on the variations; and even when they do rise to the challenge, they typically pursue a dualist strategy, seeking to explain commonalties and variations in terms of different sets of variables. Thus social-structural or economic-structural variables are frequently invoked to explain common trajectories, but they are seldom

> seriously considered in the analysis of cross-national variations. The conventional view among students of advanced capitalist countries seems to be that the social and economic structures of these countries are essentially the same and therefore cannot explain variations in political outcomes across countries. (1995:495)

These considerations are of particular importance in the comparison between the economic and political trajectories of the EU member-states, and in relation to the spatial and temporal asymmetries between the various, and varying, sub-spheres. It is here that an examination of the functions of the institutions within member-states and the EU should be made in order to determine the level(s) of supranationality that exist now and may evolve in the future. It is argued below that there has been a continuing shift from the intergovernmentalism prevailing in the early 1980s to a newly-developing form of transgovernmentalism. What caused this movement? Perhaps, the metamorphosis of some elements of traditional institutionalism into neoinstitutionalism described earlier may offer some explanation (See Table 6).

Although three particular variants of neoinstitutionalism have been advanced earlier under the constructivist-institutionalism approach adopted here, it is interesting to note that all seven variants of neoinstitutionalism in Figure 4 could, arguably, be related to the role of EU institutions. For example, of interest for the Rational Choice Institutionalists, who focus on systems and rules, might be the relaxation of the economic convergence criteria for most EU members, including France and Germany, in order to keep the launch of the euro on schedule; or, the struggles of some members, notably Germany (again) and Portugal, to conform to the demands of the Stability and Growth Pact. The ‘Empirical Institutionalists, who most closely resemble the 'traditional' approach (Lowndes 2002:96), may be involved in the identification and classification of types of institutions. The ‘Historical’ variant may consider the design of institutions and how this may influence future decision-making of individuals. ‘Network’ institutionalists may show how regularised, but often informal patterns of interaction between individuals and groups shape political behaviour, (Marsh and Rhodes 1992, cited in Lowndes 2002:96). The behaviour of states working within the formal and informal structural constraints of international politics would be the domain, perhaps somewhat obviously, of the ‘International’ Institutionalists, where the relationship between the economic and political trajectories of the EU would be of major importance.

The Social Chapter, a major institution born out of the Maastricht Treaty, would be a field, *inter alia*, in which the ‘Sociological’ Institutionalists would offer analytical insight. And

finally, at the political end of the neoinstitutionalism spectrum, Lowndes describes how the 'Normative' institutionalists would be able to consider how the norms and values embodied in political institutions shape the behaviour of individuals' (2002:96),

One way of directly relating this to the developing supracapitalism of the EU is to examine the strategy formulation mechanisms of the ECB. For a broad examination of this, central theme of the thesis, it is useful to examine the specificities of the sub-Eurosphere political economy of the ECB, and the mechanics and perspectives of ECB policy decision-making, as discussed in Chapter 5 below.

Towards a theory of national preference

Such a departure point allows a base from which to consider not how, but more importantly, *why* states exhibit national preferences. Orfeo Fioretos contextualises this (See Table 7).

> …However, despite the pivotal importance of accounting for the *shape* (emphasis added) of states' preferences, there is little consensus among scholars on what determines national preferences over multilateral institutions. (2001: 215)

The work of Fioretos is drawn upon in the following pages to apply elements of the varieties of capitalism approach to these issues. This is of significant assistance as Fioretos proceeds by considering the Societal School's position as a bridge between Realism and Institutionalism. The reasoning is that with both these theories states are considered as unitary actors, with the exogenous environment considered as the source of preferences. The societal school, with its strong 'microfoundations' emphasis, can be employed as a 'sophisticated version of the domestic approach to IR to explain why interest groups (usually firms) have distinct policy preferences and how governments aggregate these preferences to arrive at a specific policy choice' (Fioretos, 2001.218). However, this effectively would shift the analysis towards another direction, and away from the constructivist-institutionalism analytical approach that this thesis advances. This is largely, although not exclusively, due to the significant differences between traditional institutionalism and neoinstitutionalism illustrated in Table 6. It is necessary therefore to employ Fioretos to assist in the core issues surrounding national preferences, from a neoinstitutional perspective: and this is where he offers most assistance to the approaches advocated here.

With this in mind, three aspects of Fioretos's insight can be used to position a framework from which to understand why states' domestic institutional preferences may influence the form (and substance) of the multilateral, supranational institutions involved in the shaping of EU integration. First, EU institutions can be seen as mechanisms which may sustain or 'lock in' national regulatory regimes at the supranational level. For example, the Single European Market and the Single European Act have served to develop, and strengthen, the liberal free trade policies of EU member-states. On the other hand, common minimum regulations in social and environmental areas prevent processes of competitive deregulation from undermining the core features of national frameworks. Second, Fioretos argues that EU institutions may create new institutional growth trajectories at the domestic level that a country might have difficulties achieving on its own. This is called positive institution-building, as the individual state's basic reason for supporting a particular supranational institution is in order to 'supplement' its own national institution(s) with a common EU-level institutional structure in order to achieve goals that it may not be able to on its own. An example of this can be found in one of the aspects of Germany's mid-point negotiating position between France and the UK position at Maastricht regarding industrial policy. The issues in relation to industrial policy centred on whether the European Commission should have the authority to orchestrate an interventionist industrial policy. The British were strongly against the idea as it was perceived to 'offer alternative market incentives that would seriously distort economic co-ordination when Britain wanted to enhance competition policy, in line with, and because of, its Liberal Market Economy (LME). France was in favour of giving increased powers to the Commission, which would direct EU funds towards specific industrial projects in particular sectors or firms (Fioretos 2001:238). The rationale of the German position was based on regulatory mechanisms that are at the heart of the Co-ordinated Market Economy (CME) model. This meant that it was in favour of only limited EC industrial policy that would have beneficial effects for German producers in areas where they had been relatively weak, such as the high-tech sector. Furthermore, this would offer opportunities for German producers to 'make use of the comparative institutional advantages of the CME in technology transfer and diffusion' (Fioretos 2001:239); while improving its innovation in the production of high-tech goods. This allowed Germany to facilitate a positive institutional growth trajectory, which it could have only achieved with great difficulty and costs alone. And third, if there can be positive institutional-building at the domestic level through, or as a direct imposition by EU-level institutions, then there can also be negative institution building. Here, the objective is to undo and reduce certain (perhaps

embedded) national institutional frameworks that are deemed detrimental to achieving desired policy outcomes. Again, Germany offers an example. This is where concerted efforts are being made by producers in some countries (e.g. large firms in Germany) to undermine antitrust and merger laws (market concentration issues) that are more restrictive at the domestic level than those of the EU. Fioretos summarises these points.

> In brief, the EU should not only be seen as an institutional constraint on member-states, but also as an organisation that presents opportunities for (domestic) institutional reform that may be difficult to achieve on a purely national scale. In that sense, joining national with European institutions presents member-states with an opportunity to explore and achieve institutional complementarities. (2001: 224) (qualification in brackets added).

Although these selected elements of Fioretos's approach above have largely focused on a neoinstitutional interpretation of influences on national preferences, a number of broader considerations emerge. The first is that by employing the varieties of capitalism approach, and by concentrating on the differences between CMEs and LMEs, while allowing for the observation that the underlying determinant of a country's preferences over the structure of EU institutions is the composition of its market economy; the approach stops short. This is because there are variations or sub-spheres, which Esping-Andersen (1990) describes as 'regime clusters', within both models. There is clear difference, for example, between the German and Scandinavian versions of CME, and between the Irish and UK interpretations of its counterpart, the LME. Moreover, the intensity and impact of EU institutional influence over the individual capitalisms within the sub-spheres varies significantly, as the empirical overview below demonstrates. The second issue is that, paradoxically, the EU institutions which (presumably) are designed to bring about economic and political convergence in the long -run, often appear to be the instruments of divergence in the short and medium-terms; the discussions above regarding the ECB and the Stability and Growth Pact being such examples. This convergence/divergence relationship is further complicated when the view of certain EU scholars who assert that institutional convergence is a prerequisite for the successful achievement of important economic gains (Heylen and van Poeck, 1995, cited in

Table 7

EU member-states' interpretations of the capitalism model

Capitalist imperative	**Methods employed**	**Examples of national variations**
Wealth maximisation	Fiscal adjustment and financial deregulation	Progressive and regressive taxation. Types and use of indirect taxation. Transfer payment levels
Single market (internalities)	Free movement of goods, services labour, and capital.	Competitive or network based.
Competitive advantage (externalities)	Regionalisation. Non-tarif barriers. EU subsidies. (E.g. Common Agricultural Policy).	Role and concentration of transnational corporations (TNCs). Outward and inward FDI. Market structures.
Maximisation of labour surpluses. (Profit)	Efficiencies through flexible labour forces. Capital substitution for labour.	Industry policy. Production methodologies e.g. Levels of research and development. Selection of technologies. Trades union membership levels. Interpretation of the Social Chapter
Reinvestment	Labour surpluses traded on the capital markets.	Stock market profiles. Debt/equity ratios. Portfolio or long-term investment preferences.

Source: primary

Fioretos 2001) is considered. The suggestion seems to be that states' preferences will converge over time if they are members of the same organisation. However, if the collective profiles of diverse forms of advanced capitalisms, either in a straightforward CME/LME dichotomous relationship, or as is called for by this thesis, a more complex set of interacting economies, are to coexist, 'the analytical emphasis in the future should not be on how convergence may be promoted but how divergence can be accommodated' (Fioretos 2001:243).

A final issue concerns the continuity of national institutions, and therefore their interaction with the EU institutions, in the face of greater politico-ideological shifts within member-states economies than has been seen over the last six or seven years. Although the Blair government and the Schröder administration are ostensibly ideologically different from their predecessors, Thatcher and Kohl respectively, they have largely continued with very similar major economic policies. The durability of stable and interactive relations between national and EU institutions would be seriously put to the test by more violent disturbances to some member-states' political complexion. A recent example was the level of support shown for Jean-Marie Le Pen in France and Jorg Haider in Austria, which appeared to mirror the emergence of a new and more extreme right-wing movement across the EU countries. The generally centrist to centrist-right 'feel' to the EU at present could be argued to generate the optimum conditions under which it has the legitimacy to maintain existing liberal market economic policy direction, whilst cementing institutional relationships between member-states and the EU. A significant shift to the right would disturb the fine balance, which appears to exist at the moment, whereby social democrats, conservatives and liberals are all accommodated. The spectre of enlargement would also appear more dark and threatening to political convergence under a more polarised or right-wing EU. This is, of course, outside the scope of this thesis but is one of the variables that will be of concern, especially to varieties of capitalism and neoinstitutionalist scholars.

The foregoing passages then, have introduced the concepts of differences of national capitalisms, together with their preferences and associated path dependencies, which have ultimately shaped the differing forms of capitalism particular nation-states have adopted overtime, and perhaps suggest that n=25. However, the similarities between some capitalism, and the influences on them, also point to possibilities for contingent typologies. Assuming, Weber's Causal Chain holds (Figure1) as a generic trajectory from all modern capitalisms, the constituent components and drivers of the capitalist state, as laid out by Meiksins-Wood

are accepted; and if the collective variations of national capitalisms as categorised in Tables 3 and 4 are applied, a framework for a typology emerges. And from this, three common key variables can be identified.

Three key variables

The first key variable relates to the macroeconomic rationale of all capitalist economies involves the primary relationship between the creation of wealth and its resultant redistribution. So, in linking any particular typology it involves the state's policy strategy and mechanisms in managing the interface between the producers (and productive forces) of wealth and the appropriators, or main recipients, of such wealth. In Marxist dialogue, the question is how do states decide upon how much should their producers retain of the surplus labour they have generated, and to what extent, or in what proportions, are their appropriators encouraged (discouraged) to accumulate immediately or reinvest this surplus labour for future (exponential) accumulation? Of course, this explanation of macroeconomic rationale is overly simplistic because between the producers and the appropriators there is a third group within a nation's population that neither produces, in a significant materialistic sense, nor appropriates wealth in any meaningful or measurable way. In other words, a complexity of the interface described above is that this third group will also consist of non-producing benefactors and beneficiaries of state redistribution of wealth. The state's policies then have to determine to what *extent* the producers' surpluses should contribute to this redistribution, and/or by how *much* of the appropriators' wealth, previously accumulated or currently being appropriated, should be redirected to these economic actors. In essence, and perhaps paradoxically, this tertiary collective defines by default, the complexion of the national capitalism in which it exists. This welfare element of capitalism as it has developed, and is developing, in the EU countries, is reducible to three alternatives; the *Three Worlds of Welfare Capitalism* as described by Esping-Andersen (1990). Consistent with the comparative method, Esping-Andersen identifies and compares the conservative, the liberal and the social democratic 'regime types' of state welfare. Moreover, these three regime types can be used as an overlay to the rationale level of analysis of national capitalisms within the EU described above. The German and Benelux economies can be aligned to the conservative label, Ireland and the UK are examples of the liberal system, and the Scandinavian countries can be broadly described as social democracies.

The second level of key variables that inform the comparison method comprises the main components of capitalism as described in its historical sense, and can be applied to the

national capitalisms of the EU. Meiksins-Wood (2002), builds her history on the origins of capitalism by comparing capitalism with previous forms of social organisation, such as feudalism. In doing so, she identifies those features or components, which are uniquely capitalist. From the modern EU nation state's perspective these features can be cardinally sequenced by imperatives, as follows. Then nation's wealth, and therefore well-offness, but not necessarily well-being, is increased by firms' compulsion always to maximise profit. This is most efficiently achieved by competition in a single market. In turn, this drives the competing firms to continually search for cost-effective production in order to gain competitive advantage(s) largely by increasing labour productivity, or replacing it with machinery. Finally, the labour surpluses thus gained, may be reinvested in the capital markets in order to facilitate further exponential accumulation of such surpluses.

In relation to the individual capitalisms of the EU, and in their respective sub-spheres, these imperatives offer opportunities for analysis at a national operational level. That is, this level of analysis can be employed to consider, for example, the efficiency of the German workforce with that of French labour output whilst also measuring the two countries' stock market performances over the same period; or, alternatively, comparing reinvestment levels in the newer industrialised growth economies of the poorer Southern European Economies (SEEs) of Portugal, Greece, and Spain. These components can also be employed to compare the sub-spheres identified below; for example, to examine the growth pattern differentials between the LMEs and the CMEs, or the unemployment trajectories of the 12 Eurosphere countries, and the 13 non-Eurosphere countries. Additionally, these features of capitalism, although variously co-ordinated and prioritised by the individual members of the EU in a domestic sense, are planned to be pulled gradually, but continuously, by the homogenising forces of the EU's institutions, towards a 'one fit' Euro-construct that members have (variously) contracted to follow. This allows a 'control' model of capitalism against which to both measure individual state variations and the extent of the development of an EU supracapitalism.

The third level of analysis identified, aims to determine those cultural and historical formations, social structures and forms of state that have set the member-states on their respective political trajectories. The extent of the embeddedness of path dependency brought about by the above forms and structures will impact on their ability to move towards the political union that is the EU's ultimate objective.

One of the main problems with determining these aspects of the EU countries is that all 15 countries have, arguably, different political path trajectories which have been largely

determined by historical events impacting on, and developing, individual national cultures. However, although there is again the recurring problematic of complexity in this regard, there is a major analytical advantage to be found when employing the comparison method in historico-cultural terms.

Towards an typology of EU national capitalisms

The departure point for the selection of typologies of EU capitalisms here was first to establish a 'needs of analysis' framework. The structure of typologies would have offer the opportunity to compare the EU capitalisms over a longitudinally acceptable timeframe; a clear pre-euro and post-euro comparison; the ability to compare the macroeconomic performances of both these sub-groups, to allow for differing socio-cultural evolutions, socio-political dynamics, and geopolitical positions; the scale, scope, and types of economies, and, above all, differing national capitalisms' expectations of, and contribution to, the EU overall. This entails selecting typological groups where each could, where possible, have a euro sub-group and a non-euro sub group. This is particularly important because the planned analysis has to be flexible enough to include 12 capitalisms that constituted the membership from the beginning of the period of study, the three mid-stage pre-euro additions in 1995 known as the fourth enlargement, and the accession in 2004 of ten new members that significantly swelled the membership to 25 countries, and which not only more than doubled the scale of the collective, but also introduced another marked increase in scope of the EU, together with a major shift in its overall dynamic. This is because the balance between Eurosphere and non-Eurosphere member-states had now tipped in favour of the latter sub-group; a sub-group which simultaneously introduced two further sub-divisions of its own: those existing members who had chosen to stay with their domestic currencies, and the newly acceding countries that would compulsorily join the Eurosphere after a qualifying period

It is clear at this point that the existing literature, as broad and varied as it is, does not have the individual or collective capacity to accommodate the required pre and post-euro analysis, the Eurosphere versus non-Eurosphere level of investigation, or to capture the longitudinal timeframe in its completeness and with the pre-designated temporal points for analysis. However, within each of the literatures cited above there are one or more elements of potential analytical utility that can be borrowed and stitched into the overall fabric of the typology selected for the analyses below. And, at this point it is instructive to briefly examine

the underpinning rationale for these approaches within a view to establish those components that may be included.

Beginning with the work of Michel Albert, whose seminal work *Capitalism against Capitalism* exploded the Anglo-Saxon or English-speaking model of capitalism, so often taken as a given typology, or paradigm, both before his intervention and right up to the present day, by arguing that the America version of capitalism was becoming dislocated from the British Anglo-Saxon construct. This perspective was derived from his central observation that…

> Given that the UK, for all Mrs Thatcher's efforts to import Reaganism is destined to draw nearer Europe while distancing itself somewhat from America, the inescapable conclusion must be that constitutes an economic model in and of itself. (Albert, 1993)

This is at once both useful and contentious. It is quite normal for the emergence of the neoliberal movement to be attributed to Thatcher and Reagan, as their joint crusade against the failure of Keynesian-influenced macroeconomic management, long-adopted by most western governments following the Bretton-Woods accord at the end of Second World War, but now seen as impotent in the face of what had become transnational contagions of spiralling inflation and stagflation. And, in this partnership, it is assumed that the two national capitalisms' and their 'Special Relationship' were not only one and the same, but that the Anglo-US version of capitalism also encompassed Australia, Canada, and New Zealand.

'Reaganonics', as the model became known, was a new version of capitalism, and one really only shared by other economies at the margin. For Albert, the Anglo-US version had only been perpetuated by the post-war American need for 'trans-Atlantic solidarity with not only the UK, and although more remotely, with Europe, in the perceived confrontation with communism. And, following the collapse of the Soviet Union, and therefore the end of the immediate threat to America's European interests, it was no doubt insightful of Albert to describe this new version as neo-American capitalism However, what can be observed in terms of the Anglo-US, or Anglo-Saxon, model is the shared view on the efficiency of market mechanisms and the need to keep commercial regulatory constraints to a minimum. In this way, the model can be relaxed to a more fluid version of national capitalism into which both the UK and the United States can be seen to exist, that of the liberal market economy, later to

become one of the versions of capitalism identified by Hall and Soskice in their *Varieties of Capitalism* analysis. Therefore, Albert is both contentious and useful, in that for the purposes of this research it is possible to strip out any encumbrances that ties to American capitalism may present, while retaining those elements pertinent to both the UK and to Ireland who enjoy a 'joined at the hip' economic relationship, and one much closer that the UK does with the United States. And, in this, we can secure the first typological group of the analysis here; that of the Liberal Market Economy (LME), and with it a sub-division as the result of Eurosphere membership, to reveal the UK as a liberal market economy, non-euro (LMENE), and Ireland as a liberal market economy within the Eurosphere (LMEE).

This distinction can be seen as much influenced by Hall and Soskice, as by Albert, although for different reasons. Whereas Albert effectively deconstructed the Anglo-Saxon/Anglo-US model to reveal a separation of the neo-American model from the UK, perhaps although loosely staying together with Australia, Canada (to limited extent), and New Zealand, Hall and Soskice's compendious distillation of capitalism, effectively employs the Liberal Market Economy (LME) model as a counterweight to the Co-ordinated Market Economies (CME) pre-eminent in Europe and Japan. In this, they faithfully mirror the above six Anglo-Saxon economies as a collective, while aggregating the economic profiles of 11 economies, including Japan and ten European capitalisms, seven of which are EU member-states. It has to be noted that while, in effect, this is a dichotomous analysis and therefore hardly a variety of capitalism, including really nothing more than a measure of the levels of different governments' direct involvement in their respective economies, and an evaluation of the extent to which firms operate at arm's length to politico-economic institutions, such as banks and trades unions, it does offer, in an EU context, the opportunity to cluster those national capitalisms that are meaningfully influenced by Germany directly, or indirectly by their own similar internal relationships between firms and institutions. And this, in terms of the intended analysis here, is important, as one of the major metrics employed is indeed set to measure the potential for a functional relationship with politico-economic institutions: in this case the ECB. Therefore, by adopting some convenient elements of the *Varieties of Capitalism* approach, and separating what are mature EU economies, into LMEs and their CMEs counterparts, the second typology can be identified. And, as with the LME model, there are those CMEs in the Eurosphere, and those outside. There are now four analytical typologies, two Eurosphere groups (CMEE and LMEE) an two ex-Eurosphere collectives (CMENE and LMENE) ; and this where the varieties model, for in as much as it is a variety ceases to be of much further use here.

At this point then, there are four typologies: those categorised as CMEE; CMENE; LMEE; and LMENE. These CMEEs comprise Austria, Belgium, Finland, France, Germany, Italy, Luxembourg, and the Netherlands. The CMENEs include Denmark and Sweden. Ireland is the LMEE, and the UK, the LMNE. However, at this point the models are overly simplistic, and more qualification for, and of, each of the individual country's inclusions are required, alongside a recognition consistent with the arguments regarding the need for multi-level considerations. Although Hall and Soskice provide a convenient list of both CMEs and LMEs, and that these do form the basis for the construction of the four typologies used here, there needs to be at least a recognition of intra-group sub-sets that may somehow influence the reliability and validity of the outcomes of the quantitative analyses carried out below in Chapter 6 below, and which may of course also be used to reinforce identified similarities as well as differences. Starting with the Germany, and its direct influence, it is almost impossible to disaggregate Germany from Austria, on culture, language, geographical, geopolitical, and trade. In the same way the Benelux countries of Belgium, the Netherlands, and Luxembourg share a number of similar relational ties, not least of which are the geographical, geopolitical, and trade ties, and that all three came together to comprise three of the six founder members of the EU, And moreover, as the Benelux collective, are often seen as a singular unit of analysis. France and Italy, notwithstanding obvious cultural and geopolitical differences are very clear, they closely share the state interventionist, or the statist form of capitalism that Story (2000) identifies by using a matrix that cross-tabulates concentration of ownership against corporate concentration within economies, and shows France and Italy more likely to exhibit state allocation of capital, joint state and family enterprises, and industrial sector and government cohesion policies. Also within my 'borrowed' CME collective are Denmark, Finland, and Sweden, and these countries are probably the most difficult to justify inclusion within a largely German-influenced or, more broadly, Rhinish, typology; especially as Esping-Andersen (1990) considers the Scandinavian countries as closely linked via their welfare state regimes, and that this could qualify them as a typology of their own – a Scandinavian-type capitalism. However, and perhaps ironically in the light of the above perspective, these capitalisms are brought together not only by their social care profiles, and as the analysis on social benefit payments in Chapter 4 below suggests this commonality must be open to closer scrutiny; but the main qualifying linkage for the analysis here is the overall level of state involvement, and inclination towards direct institutional influence in their economies that both not only binds them together as a sub-

group, but more significantly includes them all on the grounds of direct state involvement, regardless of their Eurosphere status.

Moreover, this 'second level' analysis of the CME subsets also fits in with three of the four types of national capitalism that the Grouch and Streeck (1997) approach identifies, where the typologies are grouped into market-oriented; Rhineland or corporatist; statist; and social democrat. Here, the USA, Canada, and the UK are cited as examples of market-oriented, Germany and Japan as Rhineland (Rhinish) corporatist, France and Italy as Statist, and Sweden and Austria as social democrat, when considering the nature and characteristics of labour market structures.

In terms of the LME typologies employed in this research, it is perhaps at first glance awkward that each typology has only one unit of analysis when separated by membership of the single currency. However, on nearly all counts of distinguishing between CME and LME, the economies of Ireland and the UK demonstrate the clear *laissez-faire* separation of state from business and markets, ongoing programmes of privatisation of state-controlled organisations, evidence of increasing de-regulation wherever possible, diminishing labour power through reduced trades union memberships and the resultant development of flexible labour markets, and the marketisation of former public service sectors such as health and education. The grouping of the LMEs in this case not only aligns with both the Hall and Sokice and Crouch and Streeck models, but also that of Hooge, (1998) and Hooge and Marks (1999), where Hooge (1999:458), in particular, reinforces the LME qualification employed here by making the distinction between neoliberal and regulated capitalism, when discussing the problems of EU cohesion, and whereby he notes a number of related dichotomous tensions between 'unfettered and institutional capitalism'; the 'neo-American and versus social democracy'; 'Anglo-Saxon versus the Rhine social market economy'; and 'unco-ordinated or co-ordinated regimes'. In doing so, he raises the central question posited in my opening chapter here regarding the asymmetric distribution of wealth, and locates the question in the EU by asking 'to what extent- if at all- should the European Union redistribute from rich to poor? In short, what form of capitalism do Europeans want? And, where he sees his neoliberal and regulated versions of capitalism as 'the two dominant contending models for organizing European society'. In doing so, he charts the 'death of national Keynesianism' and the 'liberalization of the common European market in the 1980s leading to the reorganisation of European political economy'.

It is with this level of qualification that there can be seen the potential for the n=1 position discussed above, but that with these first four typologies enough justification can be seen for

the typological grouping, even if only the contingent analytical demands of this research. However, the remaining four typological constructs suggested here have altogether contrasting rationales and internal logics.

Three of the remaining 13 national capitalisms of the EU, Greece, Spain, and Portugal can be seen as a pre-determined typology. As categorised by Neal and Berbazet (1998) above, all three are southern European Economies, are making the transitional from agricultural based economies to industrialised economies, have relatively recently become democracies, and are all designated Eurosphere capitalisms, and in this convenient form are collectively labelled as Southern European Economies in the Eurosphere (SEEEs). And, there is as well a clearly identifiable subset; one that can pair Portugal and Spain as the Iberian sub-category, although based on geographical rather than geopolitical, and recent politico-economic developments as opposed to socio-cultural alignments. Moreover, it could be argued that Portugal may also form a second sub-category with Greece if based on their very similar size of economy and available labour force; and whereas Spain has nearly four times the size of economy and workforce. Therefore, the fifth group within the typology offered is the southern European economies within the Eurosphere or SEEE.

The ten countries that all acceded in 2004, as the fifth enlargement, share three immediate commonalities: that they all acceded to the EU at the same time; that they are all nascent, developing economies; and that they are all non-Eurosphere national capitalisms. However, these similarities having been made, there are also significant contrasts, that, as with the other typologies also offer grounds for sub-group formations. First, the ten fall into two types of transition: those industrialising from former agricultural-based or tourism-based economies, and those progressing from backward, centrally-planned industrial economies to modern, market-based industrial economies. And, although there may be some minor structural and temporal differences, these new member-states can be seen to occupy three typologies. Cyprus and Malta, by virtue of the scale and scope of their agri-tourism economies, and their relatively diminutive geographical size can be considered as Small Island Economies outside the Eurosphere (SIENEs). The very close geographical, and relatively close geopolitical, and trade relationships, bind together the Estonia, Latvia, and Lithuania as the Baltic Country Economies, again outside the Eurosphere, and designated as BCENEs. The five countries of the Czech Republic, Hungary, Poland, Slovakia, and Slovenia come together as former, centrally-planned Eastern Bloc countries (FEBNE), and while having very different pre-communist socio-cultural and politico-economic trajectories, their transitional similarities and approximate geopolitical profiles place them in a convenient, if not ideal grouping. And, as

with the above categorisations, there are natural and politico-economic subsets that need to be recognised in order to qualifying certain analyses, and understanding certain interrelationships. For example, the Czech Republic and Slovakia were one and the same country under the Soviet regime, and Slovenia was also under the same communist influence, but as part of the former Yugoslavia. Poland is very much an individual unit of analysis within the group, largely because of the size of population and economy; as is Hungary albeit on smaller scales of both. What unifies all five in this group is the joint transition from old industrial management to new market-based service and industrial economies. However, this comes with an important qualification: there is a noticeable asymmetry in the velocity of transition between all these new capitalisms, and the time it may take each of them to qualify for the single currency is a distinguishing feature of the group. Adjusting for size Slovenia appears to be closest to adopting the euro with Hungary considered by many as a moribund economy with many structural adjustments still to be made. Poland may well be alongside Slovenia in the pursuit of currency union, with Slovakia somewhere in the middle of the pack. Notwithstanding this multi-speed characteristic of these economies, their strategic politico-economic positions and their similarities in terms of recent transitional history, bands them together, albeit contingently, for the purposes of the following analysis.

Summary

As the literature and associated commentaries suggest, it is highly improbable to effectively categorise the national capitalisms of the EU into a universal, fit-for-all purposes typology for analysis. The wide array of typological methodologies discussed above bear witness to this. Yet, once liberated by recognition of the notions of contextual contingency, and the readily available permutations and combinations of politico-economic, geopolitical, socio-economic, socio-cultural, and other possible groupings, the task can be distilled into a sort of convenience sampling model, where the needs of analysis shapes the typology, rather than the typology determining the type of analysis. And in this, all typologies will always be subject to scrutiny in terms of both rationale and justification, as is clearly the case with the varieties of capitalism genre.

Table 8

An analytical typology of EU national capitalisms

Abbreviation used	Description of typology group	EU national capitalisms in group
BCENE	Baltic country economies not in Eurosphere	Estonia (EE), Latvia (LV), Lithuania(LT)
CMEE	Co-ordinated market economies in Eurosphere	Austria (AT), Belgium (BE), Finland (FL), France (FR), Germany, (DE), Italy (IT), Luxembourg (LU), Netherlands (NL)
CMENE	Co-ordinated market economies not in Eurosphere	Denmark (DK), Sweden (SE)
FEBNE	Former Eastern Bloc economies not in Eurosphere	Czech Republic (CZ), Hungary (HU), Poland (PL), Slovakia (SK) Slovenia (SL)
LMEE	Liberal Market Economies in Eurosphere	Ireland (IE)
LMENE	Liberal Market Economies not in Eurosphere	United Kingdom (UK)
SEEE	Southern European economies in Eurosphere	Greece (EL), Portugal (PT), Spain (ES)
SIENE	Small Island economies not in Eurosphere	Cyprus (CY), Malta (MT)

Source: primary

However, this should not detract any research on EU capitalism from establishing a more meaningful analytical framework for the national capitalisms of the EU. Indeed, some may argue that it would constitute a significant oversight and major methodological weakness if the undoubted institutional uniqueness of the EU, the momentous creation of the Eurosphere (and ex-Eurosphere), and any pre-existing groups and potential clusters of EU capitalisms were not in some way taken into account. And, it is with this in mind that Table 8 above summarises the selected capitalisms

Chapter 4 Analyses of selected EU macroeconomic variables

The selected analyses of the available empirical evidence of both the EU national capitalisms and their prescribed typological collectives fall into two broad groupings of four. The first of these are the generally-accepted macroeconomic variable indicators that most of the world's governments employ as politico-economic imperatives, and which form the basis on which national capitalisms are managed through policy-making, forecasting, and target-setting. And, because these indicator variables are closely interdependent and interrelational in the sense that they contingently behave in variable sequences of subsequent and consequent nexi, they are continually being prioritised and re-prioritised by different governments facing varying domestic, international, and transnational conditions. For example, trade-offs between unemployment and inflation; growth and inflation, unemployment and growth; and the balance of payments and unemployment. Therefore, price stability - the primary policy objective of the ECB - as measured by the GDP deflator and the Harmonised Index of Consumer Prices (HICP); growth, as measured by GDP *per capita* and GDP percentage change; unemployment; and balance of payment (BOP) differentials over time are examined both by longitudinal trend-pattern analyses, and also by statistical analysis between and within typological groupings, before and after the advent of the single European currency, and therefore also after the creation of the additional Eurosphere and an ex-Eurosphere spaces of analysis. The second group of macroeconomic indicator variables are chosen because of their high level of importance within the EU itself, and therefore also with the issues surrounding the potential for an EU supracapitalism based on the single currency and the ECB. Here, interrelationships before and subsequent to the advent of the euro, of all the identified collectives and sub-groups, focus on intra and extra-EU trade patterns; productivity comparatives, taxation differences; and social benefit payment quantities.

There, are of course, myriad other indicators that could be employed, and this is clearly a limitation of this work. However, in the earlier discussions above it is argued that capitalism can generally be taken as an economic system that privileges wealth creation over wealth distribution, but that the managers of national capitalisms are charged with the responsibility of optimising the welfare (or well-offness) of their citizenry via distributive and allocative mechanisms, and that these four indicators, in addition to the main macroeconomic imperatives above, offer at least a range of analysis in line with the objectives of the research.

When considering all eight indicator variables together in the way described, it is also important here to recognise the centrality of GDP, and its derivatives GNP, NNP, and NNI, in the measurement and evaluation, and therefore the performativity, of EU national capitalisms over time. And, while it is clear that GDP has significant flaws and limitations, its development and ultimate transnational utility requires further consideration, especially in the light of the nature and unfolding chameleonic characteristics of capitalism, and the evolving structure and management of national capitalisms throughout the 20th-century.

The four main macroeconomic variables identified above, by being generally-accepted by most of the world's post-Bretton-Woods governments, became central features in managing their national economies. Perhaps more significantly, these indicators became both universally recognised, internationally-accepted, and shared national imperatives; and *de facto* the direct responsibility of individual national governments, and the basis of related intergovernmental agreements. This is in stark contrast to the widespread *laissez-faire* attitude of the majority of capitalist government regimes during the first third of the 20th-century where the impacts and influences of capitalism appeared to remain largely unchallenged, with policy responses based on the acceptance and treatment of the symptoms, rather than causal investigation and preventative courses of future actions.

Almost in parallel with the immediate post-Bretton-Woods period, the modern development of GDP as the key comparative metric and management mensuration of national capitalisms emerged at this time[15], although its antecedents can be seen to be located in the American Depression of the 1930s, where the US government employed crude estimations of stock prices, industrial production, and transport data. This first glimpse of GDP measurements in the relationship between national governments' management of their economies and the direct and indirect effects of transnational capitalist activity on their economies, importantly offered, for the first time, a method of standardising performance indicators within and between national capitalisms, and therefore the potential for international co-operation beyond simple trade agreements or embargoes. From this, in 1947, the United Nations (UN) adopted the System of National Accounts (SNA), and national capitalisms became both discrete and comparative units of analysis for the first time.

[15]GDP was a component of a standard analytical framework for measuring national economies adopted by the United Nations in 1947. This was to be the first recognised System for National Accounts (SNA)

This is important for two reasons. One is GDP's position in the significant and distinct chronological phases of the history of capitalism in the last century; the other is in the almost simultaneous evolution of the post-war regeneration of capitalism itself alongside the establishment of an internationally-shared responsibility for the world's economy, as typified by newly-created transnational institutions such as the World Bank and the IMF.

In relation to the chronological phases of the 20th century, the 10-year period can be bisected almost exactly in half around the early 1950s, with the two halves each comprising clearly defined politico-economic epochs. The first half is characterised, in a politico-economic sense, by two world wars either side of a 20-year inter-war period that is, in itself, significant not only by linking the two wars together, but also by witnessing perhaps the most damaging effects of unfettered capitalism up until that time. Governments of national capitalisms before the advent of the Second World War, but in particular during the interwar years (1919 to 1939), although charged with managing their national economic affairs in terms of policy-making and agenda-setting, were seen both to be unwilling or incapable of obviating the damaging effects of capitalism. Moreover, an effective dearth of analytical capability together with a lack of demonstrable political will appears to have rendered capitalism, as a transnational economic system as non-obviable, and as such seemingly impossible to either control or harness by individual governments.

The second half of the 20th century can be seen to be where the entire international political economy landscape was reshaped by the conduct and outcomes of the Second World War, especially in Europe. In western Europe most countries began massive rebuilding programmes, aided and influenced to a greater or lesser extent by US investment under the Marshall Plan; while most of eastern European countries fell under the control of Soviet Union, to become a collectively discrete and alternative economic system known as the Eastern Bloc. The influences of the war can be also seen to be directly related to the early foundations being laid for the EU; where the threat of westward expansionism by the Soviets, the economic dominance of the US, and the shared political will to prevent war in Europe ever happening again.

Therefore, in the early 1950s, we can identify the conditions and influences under which the idea of a European supracapitalism may be promulgated. Firstly, the new (western) world economic order designed at Bretton-Woods transformed individual national capitalisms into measurable, accountable, and comparable units of economic analysis; and with a new shared

responsibility for economic order. Secondly, both the real and perceived threats of Soviet military intentions and US economic ambitions can be seen to have generated the beginnings of a collective politico-economic will to protect western Europe. And thirdly, perhaps less obviously, there was now an available blank European canvass upon which to both promote new and radical ideas, and also changes to how capitalism and its effects may be controlled and harnessed rather than its perceived advantages being privileged over the injurious side effects of its internal contradictions and inconsistencies.

The empirical evidence analysed in the following passages of this chapter is founded upon EU national capitalisms as systems of national accounts (SNAs),that are not only measurable and internationally comparable, but now more importantly visibly accountable to their mass publics. GDP becomes the constant and central metric by which SNAs, and therefore national capitalisms, can be compared. Moreover, these are now measurements of not only national capitalisms as individual economic systems, as in pre-Bretton-Woods history, but more significantly as comparative evaluations of post-Bretton-Woods EU politico-economic systems.

With the foregoing in mind, the selected evaluations and analyses of EU national capitalisms as SNAs below are economic growth as measured by both GDP annual change and also GDP per head of population or *per capita*; annual unemployment rates; price stabilities assessed by both GDP deflator and the Harmonised Index of Consumer Prices (HICP); and national balance of payments figures. In addition to these four generally-accepted macroeconomic indicators of individual national capitalisms' performance, also included are EU intra and extra-trade openness comparisons; economic productivity; social benefits payments; and government direct taxation levels. These additional four types of evaluations are intended to broaden and deepen the assessments of EU national capitalisms by employing them to more readily align with the earlier description of national capitalisms as systems for generating, accumulating, and distributing wealth or, well-offness, whilst also optimising their citizens' overall welfare. In addition to the above, social benefit payments and direct government taxation levels are cross-correlated in order to offer a send level analysis of wealth and

Table 9

Summary of selected EU macroeconomic variables indicators

	Macroeconomic economic variable	**Methods of analysis**	**Rationale for inclusion**
1	Economic growth	GDP annual percentage change. Longitudinal illustration of patterns and trends, and statistical analysis	Main macroeconomic indicator of national capitalisms' performance
2	Economic growth	GDP per head of population. Longitudinal illustration of patterns and trends, and statistical analysis	Illustration of wealth distribution *per capita*
3	Economic Productivity	GDP per person employed. Longitudinal illustration of trends and patterns, and statistical analysis	Illustration of wealth generation *per capita*
4	Price stability	Inflation measured as a GDP deflator and the Harmonised Index of Consumer Prices (HICP). Longitudinal illustrations of trends and patterns, and statistical analysis	Main macroeconomic indicator of national capitalisms' performance
5	Unemployment	Percentage of eligible workforce population. Longitudinal illustration of patterns and trends, and statistical analysis	Main macroeconomic indicator of national capitalisms' performance
6	National accounts of balances of payments	Balance of transactions with the rest of the world at current prices as a percentage of GDP. Longitudinal illustration of patterns and trends	Main macroeconomic indicator of national capitalisms' performance
7	Trade openness	Intra and extra EU imports and exports as a percentage of GDP. Longitudinal illustration of patterns and trends, and statistical analysis	Illustrations of within and outside trade activity before and after euro
8	Taxation	Direct government taxation on earnings as a percentage of GDP. Longitudinal illustration of patterns and trends, and statistical analysis	Illustration of redistribution of wealth
9	Social benefits payment	Direct government social benefits payments as a percentage of GDP. Longitudinal illustration of patterns and trends, and statistical analysis	Illustration of redistribution of wealth and optimisation of citizens' welfare
10	Social benefit payments and taxation cross correlations	Correlation analysis between the collection of direct tax and its part-redistribution to social benefit.	Comparisons of national capitalisms' income collection and distribution

Source: primary

Table 10

Explanation of statistical output components (See Appendices 1-9)

Component	Explanation
N	Sample size – the number of years data for each typological group
Mean	The arithmetic mean of the sample
Pooled standard deviation (St Dev)	The average distance of each datum from the mean within a sample.
SE Mean (Standard Error of the Mean)	The standard deviation of a sample divided by the square root of the sample size (N)
95percent Confidence Interval (CI)	The approximate distance of two standard deviations above and below the mean value
P value (0.05 or 5 percent)	The tolerated error chance of error at 95 percent Confidence Level (CL). Any value below 0.05 (<0.05) offers evidence at the 95 percent CL of a statistically significant difference between tested samples
DF (Degrees of Freedom)	The number of possible locations for the mean value in a sample
T-Value (Student's Distribution Value)	The difference in the two arithmetic means of the samples tested divided by a formula which calculates the distances from the difference in the overall mean value of each of the two samples being compared. Similar to the F distribution below for multiple comparisons.
SS (Sum of Squares)	In ANOVA tests, the aggregate of each of the observations in a sample in terms of their distance from the mean value squared
MS (Mean of Sum of Squares)	In ANOVA tests, the Sum of Squares (SS) divided by the Degrees of Freedom (DF)
F (Fisher Distribution Value)	In ANOVA tests, the critical value of an F distribution. The Mean of the Sum of Squares (MS) of the Factor divided by the Mean of the Sum of Squares (MS). F value table have critical values for most Degrees of Freedoms in relation to selected confidence levels (CLs), usually 90 percent, 95 percent, or 99percent
S (Standard Deviation)	In ANOVA tests ,the Pooled Standard Deviation of a sample
R-Sq (R squared or R^2)	In ANOVA tests, the square of the Pearson Regression value (R)
R-Sq (adj)	In ANOVA tests , the R-Sq value adjusted to allow for the explanatory dilution of added independent or predictor variables

Source: primary

The measurement and analysis is offered at two levels: longitudinal illustrations in graphical form, and statistical analyses using t-test and analysis of variance (ANOVA). See Tables 9 and 10 above.

EU economic growth

The main macroeconomic indicator employed to reflect a country's increasing wealth is GDP, even though GDP is not itself a measure of the total wealth (See introductory chapter). What the annual percentage change in GDP does illustrate is the increase (or decrease) in a national capitalism's productive output, monetary income, and monetary expenditure; where the aggregated accumulation of income over time translates into stored wealth. Therefore, by measuring economic growth, or lack of growth, through changes in output and income over time offers a reasonable approximation of the variations in a national capitalism's wealth, and thereby the overall picture of the collective well-offness of its citizens.

Of course, the major limitation of this analysis is that it tells us little about either the distribution of such monetary income and wealth, or, if a national government's economic policies can being seen to be working. Its strength lies almost completely in the readily transferable nature of its comparability with other national capitalisms, due to the standardisation of its components, and its general acceptance as a key economic indicator by the major transnational watchdog institutions like the OECD and the IMF.

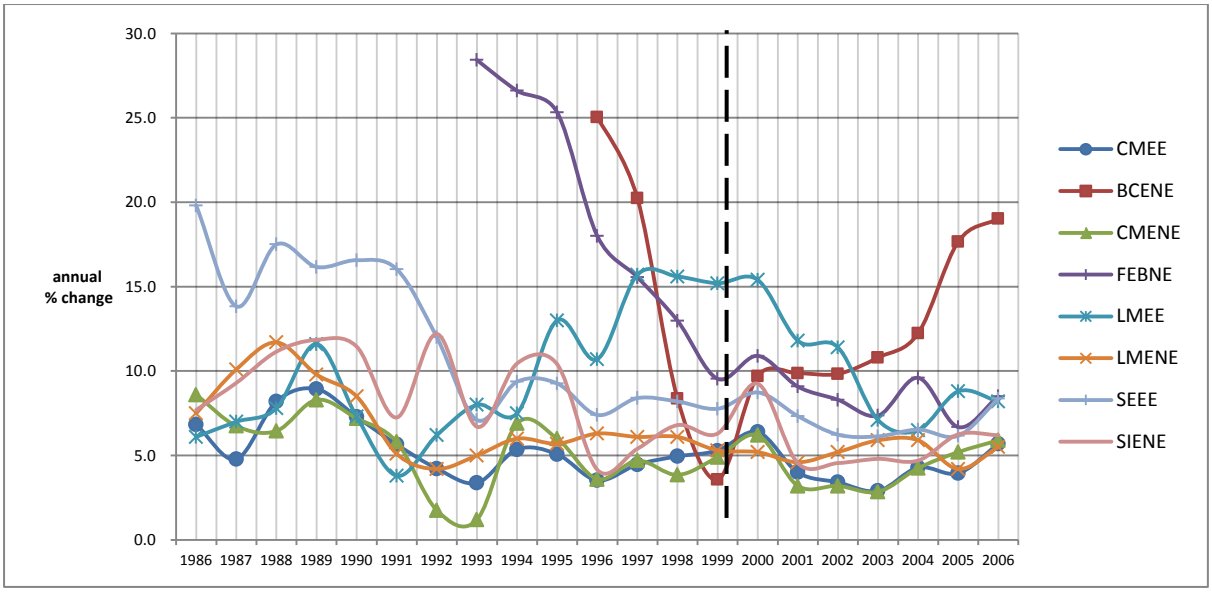
However, for the purposes of this research, there are advantages. First, economic growth can be seen to be related to capitalism, in that it approximates accumulation as one of its major imperatives. Second, in these analyses, it allows an overall critical comparison between the prescribed typologies of EU capitalisms. And third, further to the above, it allows cross-comparisons of individual components that comprise the overall GDP measurement

Figure 5 below illustrates the longitudinal trajectories of GDP variations over the 20-year period for all the EU typologies laid out above, with the vertical, perforated line indicating the advent of the Eurosphere in 1999. The most striking feature of EU growth during this period is, with the overall exception of the Baltic country economies, a very clear post-euro convergence of all the groups into a band of between five percent and ten percent of GDP. The pattern of the Baltic countries (BCENEs), whilst not converging in the same manner as the others, also very clearly exhibits a post-euro dynamic. Although the mean growth figures for Latvia and Lithuania between 1991 and 1993 significantly distort the early growth

trajectory for the group, where the former averaged 258 percent growth, and the latter was 390 percent, whilst by contrast Estonia's growth for the entire pre-euro period was only 28 percent, there is also a meaningful realignment with the other EU economies by the late 1990s, and the launch of the euro.

Figure 5

EU growth by annual percentage change in Gross Domestic Product (GDP) 1986-2006



Source: primary

The post-2002 upward divergence of the Baltic economies coincides with all three states pegging their individual currencies to the euro as a precursor to membership of the EU in 2004.

Significantly, the clear pattern of convergence appears to be set to continue to arrive in 2007-2008 at between a band between six and eight percent. Not only is this level of convergence very clear, but what is also worthy of note is that this includes both Eurosphere and non-Eurosphere economies. And, while it would analytically flawed to suggest any direct evidence of causality from such a longitudinal illustration, the advent of the euro in 1999 certainly connotes that something inducing this convergence occurred in 1999, and that it affected seven of the national capitalism typologies.

The statistical evidence appears to support the longitudinal trajectory evidence above that that the advent of the euro in 1999 has clearly affected the behaviour of the majority of the typologies in terms of pre and post-euro group comparisons, except those of the ex-

Table 11

EU Growth – summary of statistical analysis 1986-2006 (See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a, b	Two-sample t-test	64-104	0.012	Statistically significant difference
c,d	Two-sample t-test	16-26	0.138	No statistically significant difference
e,f	Two-sample t-test	8-13	0.433	No statistically significant difference
g,h	Two-sample t-test	8-13	0.014	Statistically significant difference
e,g	Two-sample t-test	8-13	0.090	No statistically significant difference
f,h	Two-sample t-test	8-13	0.004	Statistically significant difference
i,j	Two-sample t-test	24-39	0.000	Statistically significant difference
k,l	Two-sample t-test	24-34	0.016	Statistically significant difference
m,n	Two-sample t-test	16-26	0.001	Statistically significant difference
o,p	Two-sample t-test	21-24	0.029	Statistically significant difference
q,s	One-way ANOVA	120-156	0.000	Statistically significant difference
r,t	One-way ANOVA	88-96	0.000	Statistically significant difference
u,v	One-way ANOVA	184-276	0.07	Statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings for Table 11

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

Source: primary

Eurosphere CMEs and Ireland, the only LME within the Eurosphere, The statistical analysis also reveals some other interesting results. For example, there is no statistical difference between both euro and non-euro LMEs before the euro, but a very clear difference post-euro outcome. Moreover, the three all-country analyses, Eurosphere pre and post euro; ex-Eurosphere pre and post-euro, and all economies pre and post-euro all show significant statistical differences as a result of the advent of the euro. This is interesting, because it appears to suggest that it is not only the Eurosphere economies that have changed, but that ECB's management of the Eurosphere has impacted on its EU partners. This could be of course, as a result of trade interdependencies; and the whereby other economic variable analyses offered below may provide further evidence of such influence.

EU economic growth per head of population

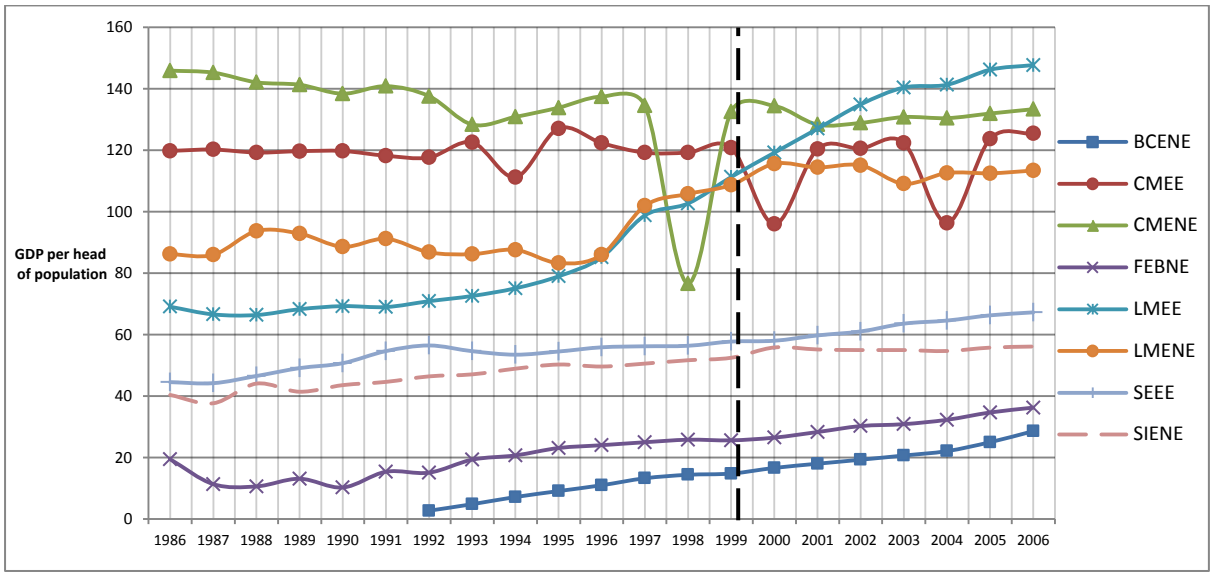
When referring to capitalism as a means of increasing and accumulating the aggregate wealth of individual countries, it is also important to consider how such wealth is distributed to individuals. However, a major characteristic of modern capitalism is that wealth is not shared proportionately or equitably, although it is often argued that economic growth over time benefits everybody in some measure. And, while these asymmetric patterns of distribution remain a major by-product of the capitalist system, economic growth as measured by head of population does offer useful comparative and longitudinal bases for analysis.

While the analysis of economic growth, as a percentage of GDP, offers very clear evidence that the advent of the euro, and associated ECB supranational management of the 12 Eurosphere economies, has offered trend, pattern, and statistical support to the idea that the economic growth, as a major component of a national capitalism's performance, can be considered in the supranational sense, the per-population head (GDP *per capita*) longitudinal trajectories in Figure 6 below are less straightforward. And, while ostensibly appearing to offer an additional, albeit crude, distributional dimension to the analysis of a national capitalism's income and wealth, it does little to meaningfully address the real problems associated with asymmetries of income-wealth allocation or apportionment. The first feature of note from the graphical illustration below is that of a distinct change of pattern between the pre-euro years (1986-1998), and the post-euro period (1999-2006). The trajectories of all the typologies, with the exception of the co-ordinated market economies outside the Eurosphere between1997 and 1999, although at markedly different levels spread between below 20 percent and just above 140 percent, they were all relatively stable. However, post-euro there

are two noticeable changes in pattern and trend. The pattern changes into a top and bottom half split, with the all co-ordinated market economies and liberal market economies enjoying an overall upward converging dynamic to a shared band range between 110 percent and 150 percent, and the remaining typologies of economies growing more slowly and in tandem, but all noticeably below 80 percent. And this is to be expected; these economies as a collective are all the EU developing economies, and although still outside the Eurosphere, now beginning to see the advantages of membership of the common market and the EU subsidies designed to generate such steady growth towards convergence with the mature economies of the EU. From this it could be positively argued that the ECB and the Eurosphere are fulfilling exactly the objectives in terms of economic growth as benefitting citizens, although without any real grasp of how this economic growth is then distributed across class systems within both typologies, and also individual national capitalism

Figure 6

Growth by increase in EU Gross Domestic Product (GDP) per head of population 1986-2006



Source: primary

Considering overall economic growth together with *per capita* growth appears to suggest that membership of the euro has benefitted all economies to a degree over the 20-year period, but more noticeably the post-euro years show signs of much clearer overall improvement for all

members, although much slower and incremental upward movements for the EU's developing economies. Moreover, a two-tier, maybe two-speed, pattern appears to be emerging, but without any real visual evidence of meaningful convergence between either the two post-euro groups, or between all the typologies as a collective.

Statistical analyses of EU economic growth per head of population 1986-2006

The statistical tests and outcomes are summarised below in Table 12 and illustrates for all the individual typologies, plus collectives of Eurosphere non-Eurosphere capitalisms, together with all economies, pre and post-euro statistical differences. And, while the visual, longitudinal analysis above offers evidence of the overall post-euro improvement of all EU economies, the statistical analysis allows a closer examination of how each of the typologies were affected by the introduction of the euro, the establishment of the euro, and the direct and indirect supranational influence of ECB monetary management.

Of the ten typologies tested before and after, six demonstrated statistically significant differences, with both the euro and non-euro CMEs together with the euro LME, and SIEs showing no significant difference, even though all post-euro mean values show overall increases. The analysis of the collectives shows that all the euro economies are significantly different post-euro, and although the non-euro grouping is not statistically different, this is not against the overall trend, as all economies are significantly different following the launch of the euro. Again, as always there must be the customary statistical caution regarding identifiable causalities within each of the above analyses, the overall evidence suggests both economic versions of economic growth have been mostly directly, and positively, affected by the advent of the euro, and therefore ECB monetary management.

Table 12

EU GDP per head of population – summary of statistical analysis 1986-2006
(See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a, b	Two-sample t-test	64-104	0.699	No statistically significant difference
c,d	Two-sample t-test	16-26	0.074	No statistically significant difference
b,d	Two-sample t-test	16-64	0.114	No statistically significant difference
e,f	Two-sample t-test	8-13	0.000	Statistically significant difference
g,h	Two-sample t-test	8-13	0.000	Statistically significant difference
f,h	Two-sample t-test	8-8	0.003	Statistically significant difference
i,j	Two-sample t-test	22-41	0.000	Statistically significant difference
k,l	Two-sample t-test	24-35	0.000	Statistically significant difference
m,n	Two-sample t-test	6-36	0.237	No statistically significant difference
o,p	Two-sample t-test	20-24	0.000	Statistically significant difference
q,r	Two-sample t-test	129-215	0.000	Statistically significant difference
s,t	Two-sample t-test	72-129	0.172	No statistically significant difference
u,v	One-way ANOVA	156-344	0.000	Statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings for Table 12

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

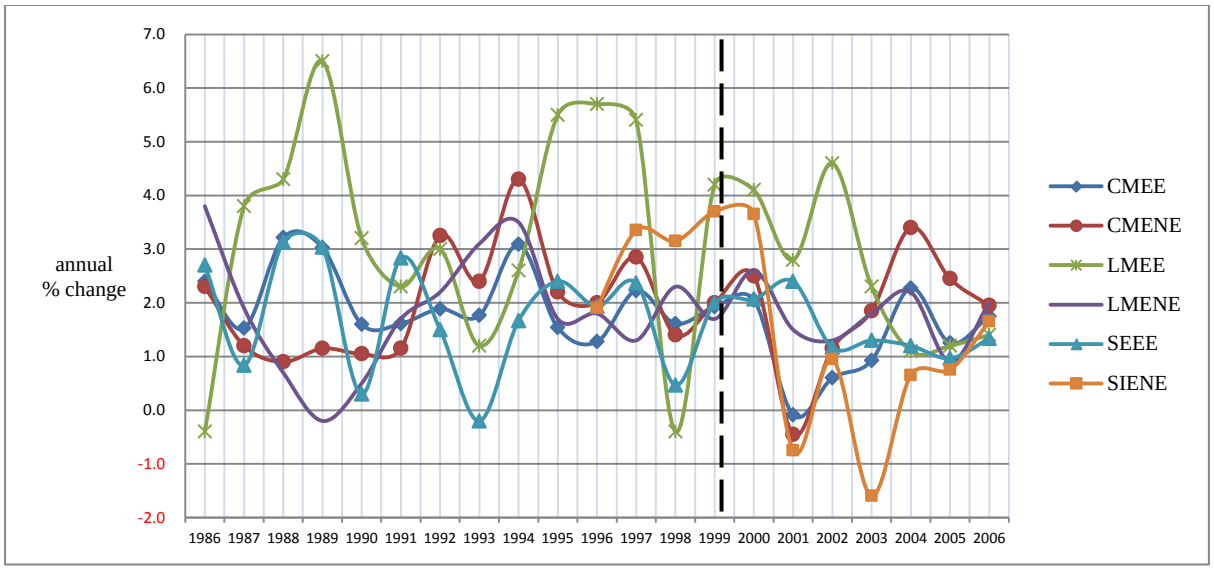
Source: primary

EU Productivity

Please see Figures 7 and 8 below.

Figure 7

EU productivity by annual percentage change 1986-2006

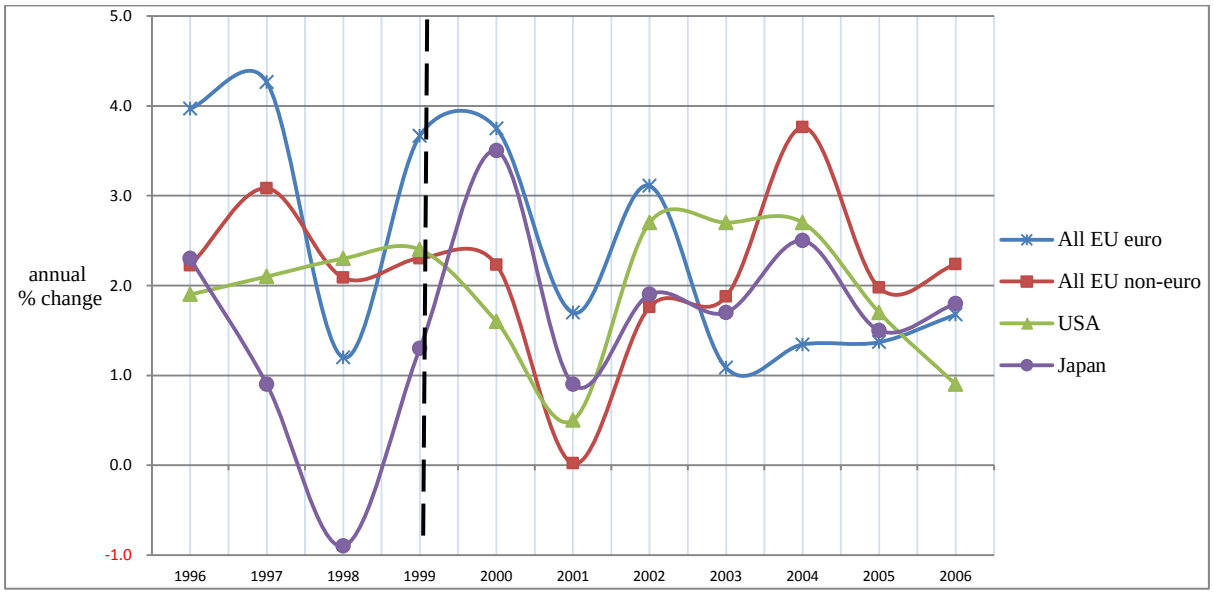


Source: primary

While it can be contested that productivity analyses of this nature are rarely like-for-like comparisons and contrasts, largely because of extreme variations in countries' technology profiles and working practices, it is useful to be able to identify overall patterns. The pre-euro pattern in Figure 7 above does show, with the exception of just one economy, a semblance of a trend that the typologies follow. What is very noticeable, and cannot be ignored, is the striking convergence of all the groups of national capitalisms in the last three years of the period under review. Again, as with all analyses of this type, causality, and the influences of individual characteristics of single capitalisms is problematic, but on the other hand a 20-year timeframe does hold some validity, not least in relation to the overall profile of 25 countries and nearly 400million people.

Figure 8

EU productivity by annual percentage change – comparison with USA and Japan 1896-2006



Source: primary

As the chart in Figure 7 illustrates, economic productivity, although showing some approximations of similar trajectories, with the exception of the LME within the Eurosphere (Ireland), before the advent of the euro, in the post-euro phase clearly has two distinct phases; 1999 to 2003 and 2004 to 2006. The first of these features a visible divergence in the pre-euro period of 1986 to 1998, whilst the second indicates very clear convergence towards an annual percentage change for all typologies of between one and two percent by 2006. The second chart in Figure 8 offers a comparison of EU Eurosphere and ex-Eurosphere productivity to those of the US and Japan. Here, there appears to be little or no overall similarity of productivity performance before the launch of the euro, although the Eurosphere countries do appear to mostly follow approximately similar peaks and troughs to Japan's trajectory over the 20-year period. However, after 1999, we can see both the EU productivity rates begin to converge alongside that of Japan's.

Additionally, the comparison with the US and Japan does offer further evidential support to the overall observation that the post-euro productivity measurements are showing clear, albeit first level, evidence of convergence. This can be particularly illustrated by looking at the three main pre-2004 outlier typologies of the SIEs, CMENEs and the euro LME, and their noticeable alignment by 2005.

The statistical analyses below do offer support to the longitudinal illustration above, in that the picture regarding productivity is not as clear as economic growth, but nevertheless clear evidence to conclude overall that there is a measurable, positive influence of the economic and monetary union over EU productivity. The statistical summaries for EU productivity are shown in Table 13 below. Here, as in elements of the graphical illustration above, the picture is not as clear as both analyses of economic growth, however there is significant support for the view that EMU through the launch of the euro has, overall, collectivised and converged all the typologies over time, although not necessarily effectively until the last there or four years of the time-frame under scrutiny.

Starting with the very last entry in the table, the pre and post-euro comparison of all EU national capitalism typologies, there is no statistical difference, and this is hardly surprising when viewing the overall longitudinal trajectory illustrated above; however, there are significant statistical differences evidenced for both the Eurosphere and ex-Eurosphere collectives during the same period. And, perhaps while at first this is surprising, over the 20-year analysis, the fluctuating pattern of the LMEE and SEEE will introduce some distortions to the overall mean of the major collective, and this can obviated by separating out the euro and non-euro collectives before and after the launch of the euro.

In terms of each of the typological groups of capitalisms, Table 13 reveals that out of eight-tests half exhibited individual post-euro statistical difference, and half showed no such difference. Interestingly, the CMEEs share this distinction with three groups of emerging EU economies, the SEEs; the SIEs, and the BCNEs. However, the extent to which any correlation here would offer any analytical utility is open to question.

Overall, the statistical outcomes presented in this section, whilst being less clear that the longitudinal illustration, do offer some indication, and some evidence, to accept that productivity has been influenced by the advent of the euro, the ECB, and the EMU regime, although the exact nature of this influence remains unclear.

Table 13

EU productivity – summary of statistical analysis 1986-2006 (See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a,b	Two-sample t-test	64-104	0.000	Statistically significant difference
c,d	Two-sample t-test	16-26	0.689	No statistically significant difference
e,f	Two-sample t-test	8-13	0.485	No statistically significant difference
g,h	Two-sample t-test	8-13	0.752	No statistically significant difference
i,j	Two-sample t-test	21-42	0.033	Statistically significant difference
k,l	Two-sample t-test	19-24	0.287	No statistically significant difference
m,n	Two-sample t-test	10-16	0.005	Statistically significant difference
o,p	Two-sample t-test	20-24	0.045	Statistically significant difference
q,r	Two-sample t-test	94-158	0.000	Statistically significant difference
s,t	Two-sample t-test	95-104	0.051	No Statistically significant difference
s,t	One-way ANOVA	95-104	0.044	Statistically significant difference
u,v	Two-sample t-test	198-253	0.511	No Statistically significant difference
u,v	One-way ANOVA	198-253	0.532	No Statistically significant difference

Source: primary with raw data from *European Economy* Statistical Annex (2006

Key codes to groupings in Table 13

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

Source: primary

EU price stability as measured by inflation

Price stability is one of the four main macroeconomic indicators from which most western governments now set economic policy targets and political strategy. Additionally, following the displacement of Keynesian politico-economic planning, and the effective collapse of the Bretton-Woods system, neoliberal policies were adopted by the majority of non-centrally-planned economies, and price stability through monetary policy, or more broadly monetarism, became privileged over growth, unemployment, and balance of payments equilibria.

In terms of the EU in general, and the Eurosphere in particular, the planned economic and monetary union was to become the responsibility of the ECB, and the primary objective of the ECB was the control of price stability through interest rate adjustment and money supply contraction and expansion. Therefore, the advent of the ECB, together with price stability through monetary policy, underpins EMU, which in turn, signals a *de facto* supranational management of the Eurosphere member-states. And, also because of the trading and political relationships between the Eurosphere and ex-Eurosphere national capitalisms within the EU, the ECB can be seen to be a major influence over not only the economic behaviour of member-states, but also to hold levels of political influence of national policy-making, thereby establishing, from the early stages of its existence, a sort of vicarious role in the development of the Eurosphere as a model of EU supranational capitalism.

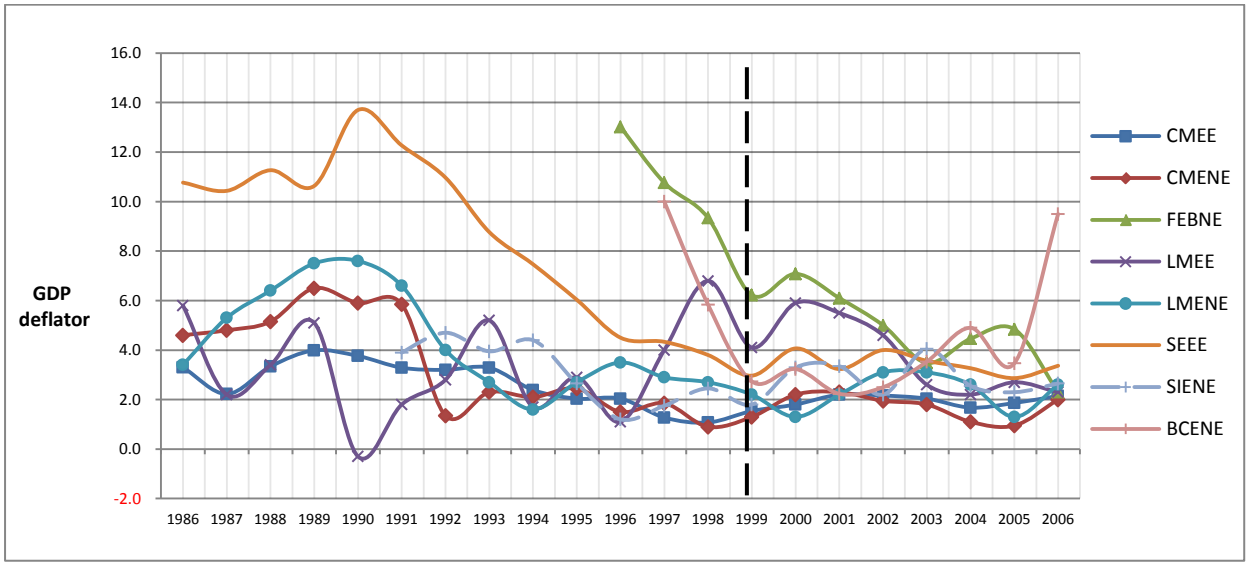
In the following analyses, two methods of measuring price stability through inflation are considered: the GDP deflator and the Harmonised Index of Consumer Prices (HICP). The main differences between the two metrics are that the HICP disregards the direct cost of housing, and that HICP did not come into common use until around 1997, and therefore data under this measurement is only available for half the 20-year period under consideration. With this in mind, the two graphs illustrated in Figures 9 and 10 below represent the longitudinal patterns of trends of GDP deflator indicators from 1986 to 2006, while the HICP figures follow the trajectories from 1997 to 2006. The subsequent statistical analyses for both measures of price stability follow these same timeframes; with the GDP deflator statistical outcomes first, and where the HICP indicators statistical outcomes offer some alternative 'within and between' typology analysis.

The illustration in Figure 9 above delineates the GDP deflator measure for the EU national capitalism groups for the whole of the 20-year period being considered here, with the Baltic

economies (BCENE), and the former Eastern Bloc economies (FEBNE), being plotted from the earliest year their figures became available. The first noticeable feature of these trajectories is a clear clustering of trend-lines after 1999, and a further closer convergence by 2003, and then a final settling of all economic groupings to between about one percent and three percent in 2006, with the exception of the Baltic countries. Such convergence of the Eurosphere typologies is entirely expected given the very narrow target band for inflation the ECB has been charged with maintaining, but the associated tight convergence of the non-Eurosphere countries offers evidence that there are elements of *ultra vires* influences emanating out of the ECB's control of interest rates. Even allowing for the knowledge that

Figure 9

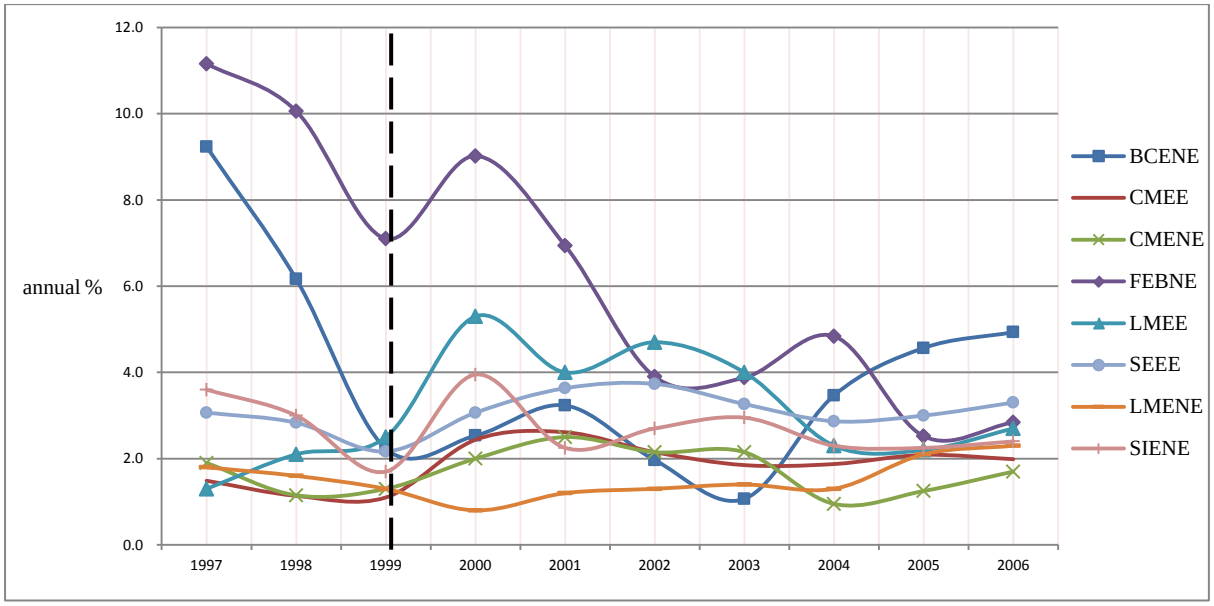
EU inflation by Gross Domestic Product (GDP) deflator 1986-2006



Source: primary

Figure 10

EU inflation by Harmonised Index of Consumer Prices (HICP) 1997-2006



Source: primary

most western governments had prioritised price stability practically from the early days of the rise of neoliberal politico-economic thinking from the very early 1980s, the starkness of this convergence is remarkable. However, it is also clear when looking at the overall picture that there was a gradual, but almost inevitable pattern of convergence(s) from 1986 onwards, and then the concentration to within the narrow band described above. There are three main drivers of this in relation to EU price stability through the control of inflation. The first of these relates to announcements, chiefly led by Jacques Delors, that the committee set up to draft an operational plan for full EMU, was nearing completion of the document for this, and that most EU economies who aspired to join the resultant launch of the single currency would be expected to plan towards achieving the necessary convergence criteria suggested in the early draft, and later published in the full report on EMU. The second factor was the announcement at the Hanover summit in 1988 that progress towards achieving the 1992 target set out in the 1986 Single European Act (SEA), for completing the internal market was ‘irreversible’. And the third, perhaps noticeable, but more of medium-term importance, was the movement towards a stable differentiation between intra-EU trade openness and extra-EU

trade openness, where from 1990 in general, but particularly from about 2002, intra-EU trade was situated in a band between 20 percent and 60 percent of GDP, and extra-EU trade had narrowed into a band of between ten percent and 40 percent. The obvious effects of the single market, the fixed exchange rates of Eurosphere members, and the resultant stable purchasing power parity (PPP) between all EU economies, all having their part to play on the back of increasing concentration of trade within the EU compared with the EU's trading partners in the rest of the world.

The HICP illustration in Figure 10 above offers only limited comparative analysis in so far as this method of measuring price stability through inflation was only accepted by the EU from 1997 onwards. As a metric HICP tells a similar story about inflation, but disregards housing mortgage interest payments, which are considered by the EU as investment expenditures as opposed to consumption. This explains why there is a slightly different trendline profile, but a difference that does not distort the overall pattern of convergence. And, interestingly the Baltic countries, who were outliers in the post-2005 trendlines under the GDP deflator illustration at nearly ten percent, drop down to around five percent under the HICP metric, suggesting a significant increase in mortgage-financed home ownership within and between Estonia, Latvia, and Lithuania from 2004.

Table 14

EU inflation – summary of statistical analysis 1986-2006 GDP deflator measurement (See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a, b	One-wayANOVA	64-104	0.005	Statistically significant difference
c,d	One-wayANOVA	16-26	0.009	Statistically significant difference
e,f	One-wayANOVA	8-13	0.581	No statistically significant difference
g,h	One-wayANOVA	8-13	0.013	Statistically significant difference
i,j	One-wayANOVA	24-39	0.000	Statistically significant difference
k,l	One-wayANOVA	23-24	0.000	Statistically significant difference
m,n	One-wayANOVA	15-16	0.558	No statistically significant difference
o,p	One-wayANOVA	21-24	0.019	Statistically significant difference
q,r	Two- sample t-test	96-156	0.000	Statistically significant difference
s,t	Two- sample t-test	117-121	0.007	Statistically significant difference
u,v	Two- sample t-test	213-277	0.004	Statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006

Key codes to groupings in Table 14

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

Source: primary

Table 15

EU Inflation – summary of statistical analysis 1997-2006 Harmonised Index of Consumer Prices (HICP) (See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range(n)**	**p-value**	**Outcome**
a, b	Two-sample t-test	20-80	0.334	No statistically significant difference
c,d	Two-sample t-test	10-10	0.004	Statistically significant difference
i	One way ANOVA with Tukey analysis	10-80	0.000	Statistically significant difference
e,f	Two-sample t-test	20-30	0.024	Statistically significant difference
g,h	Two-sample t-test	30-30	0.043	Statistically significant difference
a,b,c	One way ANOVA with Tukey analysis	10-80	0.000	Statistically significant difference
a,b,d	One way ANOVA with Tukey analysis	10-80	0.306	No statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings in Table 15

a	CMEs in Eurosphere	1997-2006
b	CMEs ex-Eurosphere	1997-2006
c	LMEs in Eurosphere	1997-2006
d	LMEs ex-Eurosphere	1997-2006
e	SEEs in Eurosphere	1997-2006
f	SIEs ex-Eurosphere	1997-2006
g	FEBs ex-Eurosphere	1997-2006
h	BCEs ex-Eurosphere	1986-1998
i	ALL	1997-2006

Source: primary

The statistical analyses of both methods of measuring inflation are intended here to consider different intra-EU aspects of inflation. The different timeframes of the two analyses suggests separate treatments, especially as any direct comparison would be akin to an apples and pears comparison, and therefore relatively meaningless. What it does allow however, is for the hitherto standard of statistical analysis carried out in this chapter to be applied to the GDP deflator figures, with the HICP profiles being examined using multiple-grouping ANOVA within-and-between analysis.

Overall, the GDP deflator largely supports the analysis based on the longitudinal trendline illustration above, with only two typological groups, the LME Eurosphere economy and the SIE small island pairing not demonstrating statistically significant pre and post-euro differences. Moreover, all three of the collective groupings, ALL Eurosphere; ALL ex-Eurosphere; and ALL economies before and after the euro, clearly demonstrate statistical difference, and it is then possible to consider the LME euro and SIE non-euro groups as outliers in this analysis, a proposition supported by the visual evidence in Figure 9

In terms of the HICP analysis using ANOVA for multiple groups it is possible to identify not only statistical differences, of which there are only two tests out of seven that do not show a post-euro difference in inflation, but also to examine some intra-group comparisons with the additional aid of Tukey analysis, which highlights those within a group creating statistical difference. For example, test number 3 (See Appendix 4), which compares all the typologies over the whole period (1997-2006), and offers a graphical spread of the groups in relation to each other, their respective mean inflation values, and algebraic cluster analysis that identifies both sub-groupings and outliers.

EU unemployment 1986-2006

Again, unemployment is considered one of the main policy-setting and economic-targeting macroeconomic indicators, and although usually subjugated below price stability through the control of inflation, and economic growth, it remains arguably the most important barometer of economic measurements, and also often the most politically sensitive for electoral mass publics, and therefore also to incumbent administrations. And, as with the other three main indicators, it has important correlative interrelationships with them, especially growth and inflation. However, the neoliberal agenda has largely managed to persuade electorates that by privileging flexible labour force regimes over both rigid employment contracts and trades union membership, and in doing so has legitimised not only management short-termism and the associated generally-accepted *ad hoc* redundancy notices, but also reluctance on the part of labour forces to pursue issues against, or challenge the decisions regarding pay and conditions of work by, employers and their representatives.

Moreover, as the neoliberal era unfolds and proliferates, the structure of employment patterns has been changing conterminously, as the shift from manufacturing to service provision, with job-sharing, fractional contracts, short-term and zero-hour contracts of employment, shifts from benefit-defined to contribution-defined pension rights, training budget reductions, and the increasingly strategic management function of human resource departments, have all contributed to an almost complete shift of labour relations power from labour to capital in western democracies between the late 1970s and the early 2000s.

The main challenge for the EU, and its member national capitalisms as a collective, is to be seen politically to be addressing trans-EU unemployment as a unitary issue, when the reality is one of causes and effects of widely divergent and manifold unemployment types presenting multi-dimensional, complicated, and complex economic problems. This can be seen when considering employment sub-groups taken from the typologies of national capitalisms used throughout this research. At the first level of complexity, there is the dichotomous relationship between the developed and developing economies within the EU membership, usually as a result of the developing member-states making the transition from agricultural economies to industrial economies. And this is hardly straightforward because some of the industrial economies are already planning for their own transitions from industrial to knowledge-based economies in the face of increasing competition from newly-emerging industrial powers outside the EU. And, in the EU context, whereas the SEEs and the SIEs can

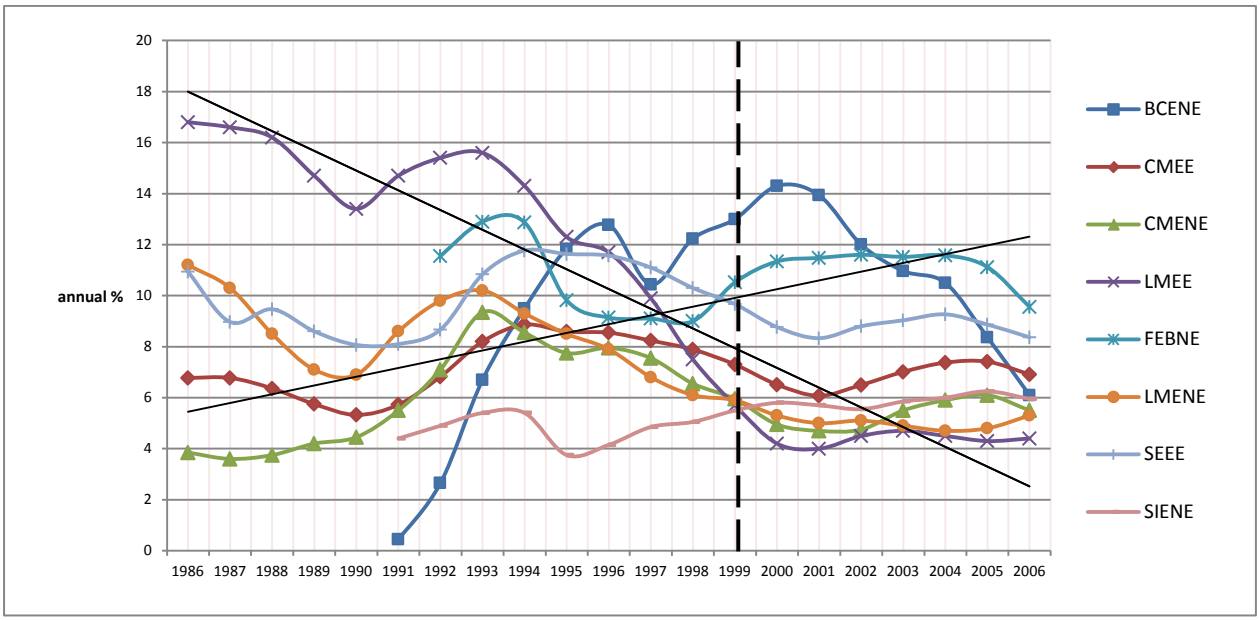
be seen as traditional agriculture-to-industry types, the FEBEs and the BCEs are already industrially-based, but having been formed within centrally-planned economies, are emerging not from agriculture to industry, but from backward industry to advanced industry. At the second level of complexity can be seen the different potential problems besetting the co-ordinated market economies and the liberal market economies, each with very different attitudes to labour markets, and the rights of workers. A third level sees the Eurosphere economies compared to the non-Eurosphere economies, although this is further compounded because there are CMEs and LMEs in both camps. And then there are the twin catalysts of the Common Agricultural Policy (CAP) and the EU structural funding programme, operating across all EU economies and typologies, at different times, for different reasons, with different objectives (not all economic), and at different volumes and intensities.

It is then against this multi-dimensional EU unemployment landscape that the longitudinal illustration (Figure 11) below is considered. At first glance, especially between 1986 and 2001, the above-mentioned complexities and complications, appear to be graphically mirrored. However, a second examination of the pre-euro years, suggests more of a gently undulating but relatively stable set of trajectories with most of the typologies settling within a band of between four and eleven percent; the only outliers being the Baltics and the LMEE. Post-1999 sees a clear downward convergence from the upper boundaries to within ten percent by 2005, together with the establishment of a stubbornly persistent baseline of four percent; which maybe projecting the future 'natural' rate of employment for the EU as whole.

The statistical outcomes set out below, and summarised in Table 16 seem to reflect the complexity and complication suggested in the above narrative, and represent more of a typologically-related mix of responses to EMU, the ECB, and the euro. Of the eight individual typology tests, only the two liberal market economies and the SIEs demonstrate a pre and post-euro difference. In terms of the three collective tests, all Eurosphere pre and post-euro; all of non-Eurosphere; and all economies before, and after EMU, it is only the Eurosphere groups that show a significant statistical difference. This suggests that the non-Eurosphere capitalisms, which are greater in number after 2004 by 13 to 12, compared to 3 to 12 between 1999 and 2003, distort the overall impact of the single currency and fixed exchange rate. However, that the Eurosphere collective does indicate a statistically significant difference, more readily agrees with overall assessment from the longitudinal illustration that the euro has clearly had a positive effect on EU unemployment regardless of the complex and complicated structural nature of unemployment within the strata of EU national capitalisms.

Figure 11

EU unemployment 1986-2006



Source: primary

Table 16 below summaries these statistical outcomes

Table 16

EU Unemployment – summary of statistical analysis 1986-2006 unemployment as a percentage of GDP (See Appendices 1-9)

Group (see key below)	Statistical test At 95 percent confidence level (CL)	Sample size range (n)	p-value	Outcome
a, b	Two-sample t-test	64-104	0.512	No statistically significant difference
c,d	One-wayANOVA	16-26	0.298	No statistically significant difference
e,f	One-wayANOVA	8-13	0.000	Statistically significant difference
g,h	One-wayANOVA	8-13	0.000	Statistically significant difference
i,j	2-sample t-test	22-41	0.113	No statistically significant difference
k,l	One-wayANOVA	18-24	0.743	No statistically significant difference
m,n	One-wayANOVA	12-16	0.043	Statistically significant difference
o,p	One-wayANOVA	22-24	0.099	No statistically significant difference
q,r	Two- sample t-test	94-158	0.004	Statistically significant difference
s,t	Two- sample t-test	88-91	0.264	No statistically significant difference
u,v	One-way ANOVA	182-249	0.195	No statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings in Table 16

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

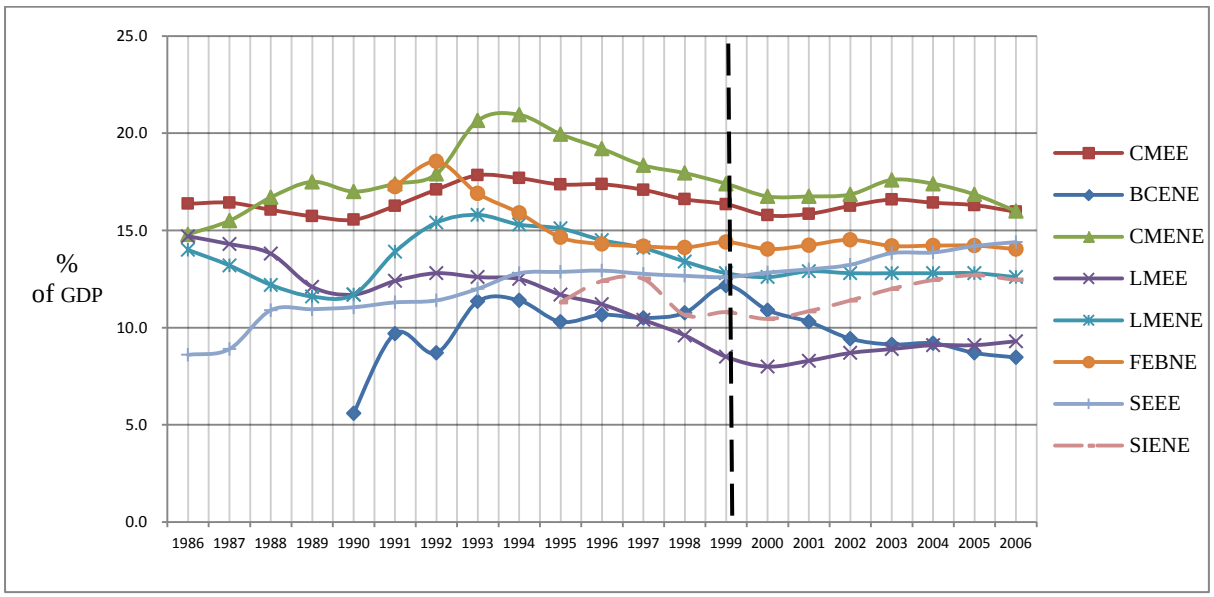
Source: primary

EU social benefits payments

The monetary production model plays a central role in this thesis as the basis upon which an EU supracapitalism may be offered as one of the possible future trajectories for EU capitalism. One of the fundamental arguments underpinning this heterodox view of how national capitalisms function, and thereby the notion that a supranational central bank may be capable of operating and managing such a collective model of capitalism, lies in the view that the allocative mode of accumulation and distribution can (and should) be allowed to function alongside non-allocative modes of accumulation and distribution. Perhaps, there is no more explicit example of non-allocative mechanisms than that of social benefits payments. Of course, without the provision of any non-allocative distributions, social benefits would not exist: how could a state-funded pay-out mechanism operate if the central authorities marketised the distribution of such handouts? This section examines the longitudinal trajectories of the EU member-states, grouped together in their prescribed typologies, by the graphical illustration in Figure 12 below, and the following supporting statistical analysis.

Figure 12

EU social benefit payments as a percentage of Gross Domestic Product (GDP) 1986-2006



Source: primary

In addition to the discrete analysis of social benefit payments, and following the subsequent section on direct government taxation, the two economic variables are brought together and cross-correlated to offer a more rounded income-wealth distribution analysis.

As with most of the longitudinal analyses there does appear to be both increased stability in patterns of the trajectories and trend convergence into an overall narrower band in post-euro years from 1999 to 2006. With social benefits payments, the first observation here is that there is a more stable set of post-euro trajectories, with all typologies gathering within a ten percent band, ranging from about 7.5 percent at the lower end to approximately 17.5 percent at the upper end. The trendlines before the single currency are both less stable, and also occupy a band range of between 5 percent to about 20 percent. It is also unsurprising to see the CME non-euro group of Denmark and Sweden showing the highest mean values in this category, as they typify the social democratic 'Welfare-State Regimes' politico-economic structure as identified by Esping-Andersen (1990:26). The major omission to this group, and perhaps then a distortion to this analysis, would be Finland who also operates a social model of this persuasion, but have been included in the CME Eurosphere typology for a number of vying comparative reasons. And, although this can be seen as downwardly skewing this particular comparison, Finland's inclusion in the CME Eurosphere perhaps offers a compensating upward adjustment to that typology's social benefits payments profile. The following analysis of direct government taxation reinforces this, where the non-Eurosphere CMEs taxation is markedly higher than all the others, and where also interestingly the CME Eurosphere capitalisms occupy the middle ground, with Finland being more typical of that group with regards to direct taxation. The second feature of this longitudinal illustration is, with the exception of the Baltic countries' economies, a gradual convergence of economies towards a projected band of, say 5 percent between ten and 15 percent. The causation of this is unclear, although the influence of the euro and the supranational management of EMU by the ECB are clearly visible, in crude outcome terms at least. Table 17 below summarises these statistical outcomes

Table 17

EU social benefits payments – summary of statistical analysis 1986-2006
(See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a, b	Two-sample t-test	94-143	0.263	No statistically significant difference
c,d	Two-sample t-test	16-19	0.004	Statistically significant difference
e,f	Two-sample t-test	8-13	0.000	Statistically significant difference
g,h	Two-sample t-test	8-13	0.015	Statistically significant difference
i,j	Two-sample t-test	24-28	0.003	Statistically significant difference
m,n	Two-sample t-test	5-16	0.873	No statistically significant difference
k,l	One-way ANOVA	20-24	0.050	Statistically significant difference
o,p	One-way ANOVA	19-24	0.323	No statistically significant difference
q,r	One-way ANOVA	94-147	0.322	No statistically significant difference
s,t	One-way ANOVA	86-104	0.005	Statistically significant difference
u,v	One-way ANOVA	198-233	0.001	Statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings in Table 17

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

Source: primary

In terms of the statistical analyses of EU social benefits payments summarised in Table 16 five of the eight typological groups of national capitalisms demonstrate statistically significant differences between pre and post-euro phases, with the Eurosphere CMEs and the non-Eurosphere Small Island and Baltic country economies showing no such difference. And, as with the previous analyses, the statistical outcomes do not offer clues regarding causation, they merely identify quantitative difference. Causality then becomes the focus of secondary and tertiary analysis, which, in the case of social benefits payments, can be addressed in both the political aspects of social benefit attitudes, and by also by linking such benefits to direct taxation levels, which are examined below.

The collective analysis in Table 17 shows us that, overall, all EU economies and also all the non-Eurosphere capitalisms demonstrate significant statistical differences pre and post-euro, isolating the Eurosphere again. This can be partly explained by those groupings' outcomes being rather dominated by the Eurosphere CMEs who also showed no statistical difference as a group, and partly by the numerical superiority of the datasets and sample sizes of all the non-Eurosphere economies influencing the overall pre and post-euro outcome.

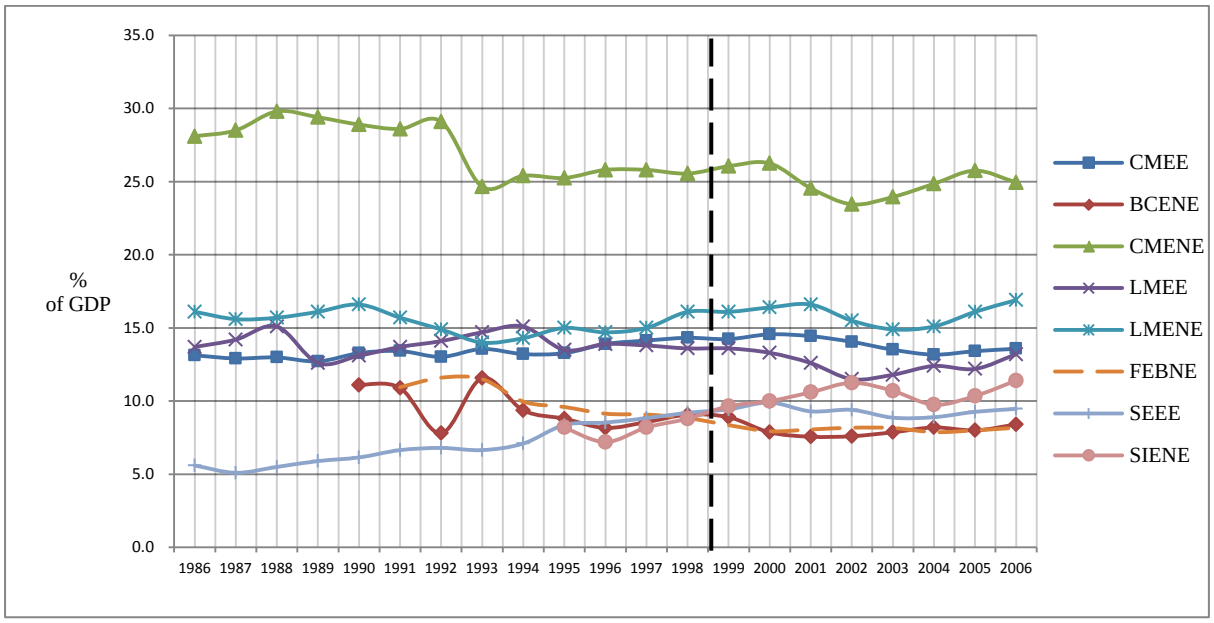
Direct EU government taxation on income

Taxation, or more precisely, fiscal receipts revenue, is included in the analysis for three main reasons. First, it is a redistributive mechanism whereby a nation's income and wealth can be employed, even if only in a normative sense in some cases, and as such offers some important checks and balances against the inefficiencies and inconsistencies of raw, unregulated capitalist activity at the national level. Second, as it represents another non-allocative set of transactions that fits in with the monetary production model version of the function of national capitalisms. Taxation cannot be subject to unfettered market forces; unless, that is, if firms were allowed to compete for the right to collect taxes and transfer receipts to the government under contractual arrangements. The ramifications of this are too complex and complicated to be considered here; but as fiscal policy and the potential for fiscal harmony within the EU remains politically sensitive, not least of which because of the very different socio-cultural trajectories that all the EU economies have historically followed in terms of direct taxation, and which has largely disallowed it from most EMU planning to date. Value Added Tax (VAT) and other indirect taxes are obvious examples, where although largely EU-influenced and redistributed, remain under the control of individual member-states.

And third, direct taxation offers insights as to how different national capitalisms approach optimising the collective and individual welfare of their citizens. For example, Esping-Andersen (1990) aggregates regime clusters into three distinct approaches in this regard: the 'liberal welfare state' exemplified by the US, Canada, and Australia; the 'corporatist-statist' grouping including Austria; France; Germany, and Italy; and the smaller collective of 'social democratic' Scandinavian countries such as Norway and Sweden. Moreover, in this regard, there is the correlative relationship that direct taxation has with various states' social benefits payments. The longitudinal trends are shown in Figure 13 below

Figure 13

EU direct government taxation as a percentage of Gross Domestic Product (GDP) 1986-2006



Source: primary

The picture in Figure 13 again follows most of the observations in the above analyses. There is a clearly different range of levels of taxation, and also pattern of trajectories before and after the advent of the euro. The pre-euro phase illustrates more variation and volatility between the typologies. The most noticeable feature of the overall period 1986 to 2006 is the stark difference between the CME non-euro countries, Denmark and Sweden, and all the

others, which clearly reflects the social democratic welfare-state-type regime prevalent in these states alluded to above. However, even with this group of capitalisms, there has been a five percent drop from 1993, and from there remaining relatively stable at about 25 percent of GDP throughout the period. It is here, perhaps that we see the clearest example of significant distributions of income/wealth of all the EU countries under examination. The profiles of the other seven typologies have some interesting features. For example, the CMEs in the Eurosphere, and non-euro LME, UK, both share stable patterns of direct taxation with almost identical average taxation throughout the period at 13.75 percent and 14.0 percent respectively, with both not moving outside a bandwidth of between 12 percent and 16 percent. Perhaps less surprisingly are the almost identical trendlines of the former Eastern Bloc states and the Baltic countries, where from the early 1990s both their direct tax revenues have averaged 9.5 percent. The Southern Europeans' economies show a consistently gradual rise from 6 percent to just fewer than ten percent by 2006, and the Eurosphere CMEs remain noticeably stable throughout the period. All in all, direct government taxation appears as the most stable of all the economic variable indicators considered here, although demonstrating less undulating post-euro trajectories which appear to be the least affected by EMU.

These observations from the longitudinal illustration are corroborated by the statistical tests itemised below, and summarised in Table 18 .The evidence shows no statistically significant difference before and after the launch of the euro for both types of CMEs, for the ex-Eurosphere LMEs, and for the all the collective groupings. With these groups, all in Eurosphere, all ex-Eurosphere, and all the economies aggregated before and after the euro show that as regards direct taxation there is little evidence to suggest any meaningful EU-wide effects due to the euro, although some newly developing economies, those either transforming from agricultural to industrial outputs like Ireland (LMEE), and the SEEs, Greece Portugal, and Spain; or the former Eastern Bloc and Baltic collectives who are moving from centrally-planned industrial and agricultural outputs to modernised market-influenced economies are shown in both the longitudinal illustration, and in the statistical test to show elements of change.

If it is accepted that taxation, especially direct government taxation, is as much a political variable as it is economic, then the above analysis makes sense. Governments find it generally difficult to introduce or institute radically different fiscal arrangements over time for fear of electoral failure; and where governments of alternative political persuasion gain power at elections, there is usually a reluctance to change mainstream tax regimes because of

the level of power of large corporations and the influence of the financial markets on policy-making.

However, the nexus between direct taxation and social benefits payments remains a central feature of, and determinant for, the type of capitalism a nation-state develops over time. For example, consider the contrast between the statist-influenced economies of France and Italy and the liberal market economies of Ireland and the UK; or the taxation and social benefit payment levels of Denmark and Sweden compared to those the Baltic countries and former Eastern bloc regimes

Table 18

EU Direct government taxation – summary of statistical analysis 1986-2006
(See Appendices 1-9)

Group (see key below)	**Statistical test At 95 percent confidence level (CL)**	**Sample size range (n)**	**p-value**	**Outcome**
a,b	Two-sample t-test	64-100	0.278	No statistically significant difference
c,d	Two-sample t-test	16-19	0.306	No statistically significant difference
e,f	Two-sample t-test	8-13	0.001	Statistically significant difference
g,h	Two-sample t-test	8-13	0.101	No statistically significant difference
i,j	Two-sample t-test	24-28	0.000	Statistically significant difference
k,l	Two-sample t-test	40-40	0.000	Statistically significant difference
m,n	Two-sample t-test	5-16	0.002	Statistically significant difference
o,p	Two-sample t-test	21-24	0.004	Statistically significant difference
q,r	Two-sample t-test	96-141	0.183	No statistically significant difference
s,t	Two-sample t-test	82-88	0.079	No statistically significant difference
u,v	One-way ANOVA	178-229	0.372	No statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings in Table 18

a	CMEs in Eurosphere	1986-1998	l	FEBs ex-Eurosphere	1999-2006
b	CMEs in Eurosphere	1999-2006	m	SIEs ex-Eurosphere	1986-1998
c	CMEs ex-Eurosphere	1986-1998	n	SIEs ex-Eurosphere	1999-2006
d	CMEs ex-Eurosphere	1999-2006	o	BCEs ex-Eurosphere	1986-1998
e	LMEs in Eurosphere	1986-1998	p	BCEs ex-Eurosphere	1999-2006
f	LMEs in Eurosphere	1999-2006	q	ALL in Eurosphere	1986-1998
g	LMEs ex-Eurosphere	1986-1998	r	ALL in Eurosphere	1999-2006
h	LMEs ex-Eurosphere	1999-2006	s	ALL ex-Eurosphere	1986-1998
i	SEEs in Eurosphere	1986-1998	t	ALL ex-Eurosphere	1999-2006
j	SEEs in Eurosphere	1999-2006	u	ALL	1986-1998
k	FEBs ex-Eurosphere	1986-1998	v	ALL	1999-2006

Source: primary

As it has been established that one of the major characteristics of capitalism as a generally-accepted politico-economic system in general, and of national capitalisms as individually comparative units of analysis in particular, is wealth creation through accumulated income and the patterns of its subsequent distribution; the relationship between direct taxation and social benefits payments requires further examination, and it is to this that the next set of analyses turns. Table 19 summarises direct taxation and social benefits payments as a framework for considering this relationship, and Table 20 highlights the level and type of relationship between these two variables

Table 19 shows all the typologies' 1986 starting points and 2006 end points, with the exception of the BCENEs commencing in 1990; the FEBEs in 1991; and the SIEs in 1995; together with the highest and average levels during the period. This matrix effectively quantifies the information shown in the longitudinal projections in Figure 13 above. Apart from much higher level of the CMENEs' direct taxation, the most noticeable feature of these quantities are the similarities between the tax levels and social payment levels of each of all the other typologies in the analysis. Moreover, the CMENE's social benefit payment level is more similar to the other groups than its level of taxation at first appears to suggest. Indeed, neither do they have the highest overall average for social payments expenditure; which at 15.5 percent is just over 3 percentage points above the average for all the national capitalisms, and which seems to throw a challenge down to at least part of the Esping-Andersen argument in his *The Three Worlds of Welfare.* However, much of this significant

disparity may be explained by much higher levels of public expenditure on, say, education, health, transport, or local authority spending in Denmark and Sweden.

Table 19

EU direct government taxation and social benefits payments comparisons 1986-2006

	Direct government taxation				**Social benefits payments**			
	Percent of GDP	Percent of GDP	Percent of GDP	Percent of GDP	Percent of GDP	Percent of GDP	Percent of GDP	Percent of GDP
	Start	High	End	Average	Start	High	End	Average
CMENE	28	30	25	26.5	15	22	16	15.5
LMENE	16	17	17	16.5	15	14.5	14	13.75
CMEE	13.5	14.5	14	13.75	16	17	16	16
LMEE	14	15	14	14	15	11	9	12
SIENE	8	12	12	10	8.5	14	13	10.75
BCENE	11	12	8	9.5	6	12	8	7
SEEE	6	10	9	7.5	8	12.5	14	11
FEBENE	11	12	8	9.5	17.5	18	14	15.5
Average	13.44	15.31	13.38	13.16	10.94	15.13	13.00	12.69
Standard deviation	6.72	6.33	5.71	6.30	5.73	3.67	2.98	3.10

Source: primary

At the other end of the scale, both the SEEs and the small island economies of Cyprus and Malta (SIEs) so follow similar levels to each other for both taxation and social benefits. And similarities can also be found in the taxation levels for the FEBNEs and BCENEs, although exhibiting very different profiles for social benefit payments. It is also clear that the average values for both tax and social benefits spending all the EU national capitalisms follow a very stable pattern, with average taxation changing by only about a quarter of 1 percent over the entire period, and social benefits payments shifting upwards, but only by 1.75 percent.

The overall picture of the relationship between the two variables can be summarised by noting the stable pre-euro pattern of direct taxation becoming a very stable set of post-euro trajectories, and the gently narrowing band of social benefit payments values, albeit not necessarily demonstrating any clear convergence. In terms of any statistical evidence for relational, or correlative, trends Table 20 below illustrates a number of combinations between the two over the whole period. Here, the very stable nature of direct taxation is confirmed by the 0.914 Pearson correlation, together with an R-squared reading of 0.835, which suggests that 83.5percent of the levels of taxation at the end of the period may be 'explained' by the levels of taxation at the beginning. There is also evidence of some relationship between the average levels of taxation and average levels of social benefits payments over the period, with a Pearson correlation of 0.585, but with only an R-squared explanatory value of 0.342, indicating that at best only just over 34 percent of the social benefits value can be directly related to levels of direct taxation. The other correlative combinations yield little of note overall, other than there is not enough empirical evidence to progress the argument for a clear relationship between the two variables, and that the only strongly evidenced outcome is the stability of EU levels of taxation over the 20-year period.

Table 20

Correlative relationships between direct government taxation and social benefits payments

Comparison	Pearson correlation coefficient (r)	R squared	P value	Level and type of relationship
Taxation at start of period with taxation at end of period	0.914	0.835	0.001	Clear, positive and very strong
Social benefits payments at start with social benefits payments at end of period	0.460	0.217	0.251	Clear and positive, but weak
Taxation at start of period with social benefits payments at start of period	0.496	0.247	0.211	Clear and positive, but very weak
Taxation at end of period with social benefits payments at start of period	0.415	0.172	0.307	Clear and positive, but very weak
Taxation at start of period with social benefits payments at end of period	0.317	0.100	0.444	Hardly any relationship
Average taxation over period with average social benefits over period	0.585	0. 342	0.128	Clear, positive and of average strength

Source: primary

Intra and extra-EU trade openness 1986-2006

The selection of the 20-year timeframe, 1986 to 2006, was largely influenced by the SEA coming into force in 1986. In doing so, the EU established one of the major objectives of the whole European project: to establish a common market where goods, people, and capital could move freely within and between all the member-states. The advent of the SEA not only signifies one of most important steps on the road to the full economic and monetary union the EU architects planned as the economic integration platform from which to move on to increasing political union, but also for the purposes of this research heralded the first concrete

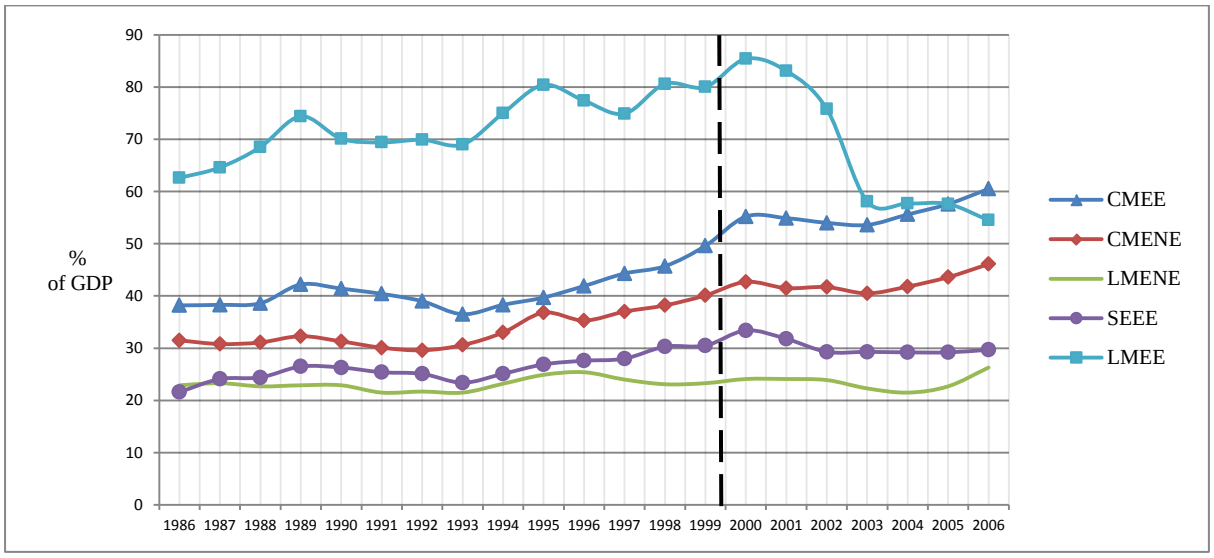
indication of the possibilities for an EU supracapitalism. The internal logic of this is simple: if one of the preconditions for capitalism is a centrally co-ordinated market system, as discussed in the passages above regarding the evolution of capitalism, then the advent of a single market, for what was in 1986 to include 12 disparate national capitalisms, must represent one of the foundations from which to build the overall structure for a supranationally-managed grouping of national economies.

The creation of such a single market promised many advantages and benefits for its members, not least of which was trade. Therefore, this final section of economic variable analysis focuses on patterns of trade, both within and between member-states, and also between member-states' trade with the rest of the world. The analysis employed here is predicated on trade openness values, which are calculated by adding together a country's imports and exports, and illustrating the total as a percentage proportion of GDP. The main areas of interest are the profiles of the selected national capitalism typologies over time; the relationship between intra-EU and extra-EU trade; the effect of the advent of the single currency and the establishment of a supranational central bank; comparisons between the different typologies relating to trade; and to consider future trajectories beyond the 20-year timeframe being used in this study. Figure 14 below shows the intra-EU trade openness 1986 to 2006 and Figure 15 plots the extra-EU trade openness for the same period. These graphical illustrations are followed by statistical analyses relating to the above objectives, and following that there is a brief commentary on the overall profile of both the typological groups and comparisons of selected collectives.

Due to the lack of reliable data for a sufficient time span for the Baltic, Small Island, and former Eastern Bloc economies, the analysis includes only five of the comparative typologies, but does include the necessary empirical evidence for these countries for the full 20-year period.

Figure14

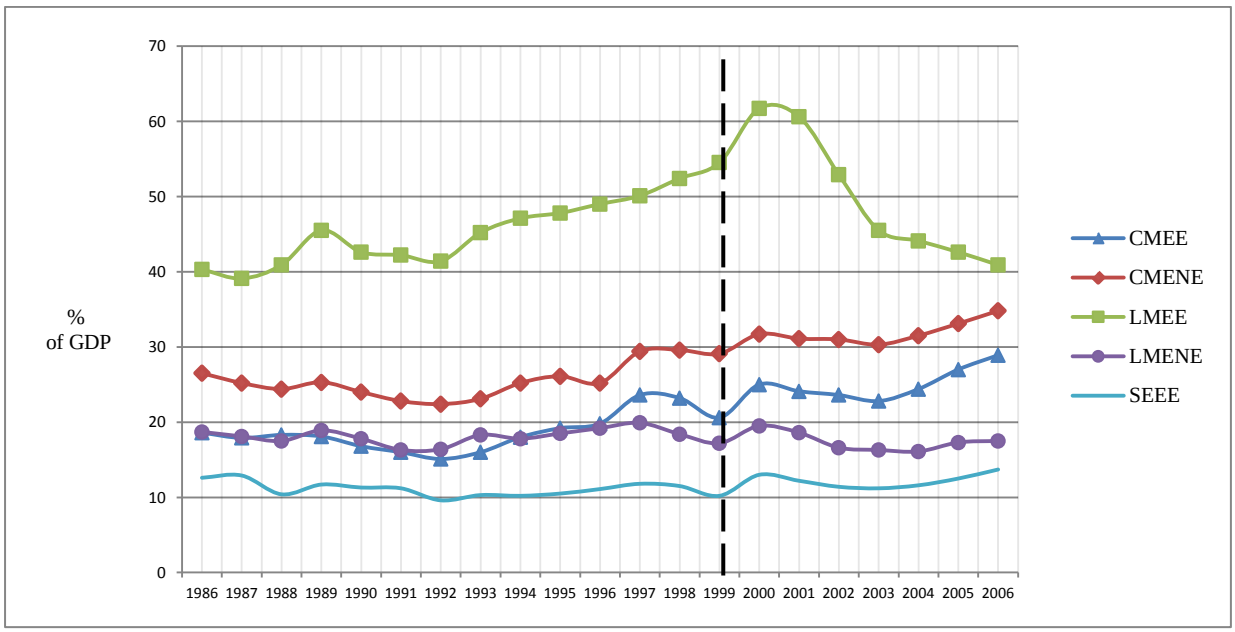
Intra-EU trade openness 1986-2006



Source: primary

Figure 15

Extra-EU trade openness 1986-2006



Source: primary

Table 21

EU Trade openness – summary of statistical analysis

Group (see key below)	Statistical test At 95 percent confidence level (CL)	Sample size range (n)	p-value	Outcome
a,b	Two-sample sample t-test	7-7	0.356	No statistically significant difference
e,f	Two-sample sample t-test	2-2	0.112	No statistically significant difference
q,r	Two-sample sample t-test	3-3	0.649	No statistically significant difference
c,d	Two-sample sample t-test	7-7	0.084	No statistically significant difference
g,h	Two-sample sample t-test	2-2	0.231	No statistically significant difference
s,t	Two-sample sample t-test	3-3	0.074	No statistically significant difference
a,e,i,m, q	One-way ANOVA	3-7	0.387	No statistically significant difference
b,f,j,n,r	One-way ANOVA	3-7	0.555	No statistically significant difference
c,g,k,o, s	One-way ANOVA	1-7	0.002	Statistically significant difference
d,h,l,p,t	One-way ANOVA	1-7	0.031	Statistically significant difference
u,v	Two-sample sample t-test	2-2	0.365	No statistically significant difference
y,z	Two-sample sample t-test	2-2	0.112	No statistically significant difference
w,x	Two-sample sample t-test	11-11	0.174	No statistically significant difference
aa,bb	Two-sample sample t-test	3-3	0.112	No statistically significant difference
cc,dd	Two-sample sample t-test	14-14	0.958	No statistically significant difference
ee,ff	Two-sample sample t-test	14-14	0.301	No statistically significant difference

Source: analysis primary with raw data from *European Economy* Statistical Annex (2006)

Key codes to groupings in Table 21

a	CMEs in Eurosphere: intra-EU openness	1986-1998	q	SEEs in Eurosphere: intra-EU openness	1986-1998
b	CMEs in Eurosphere: intra-EU openness	1999-2006	r	SEEs in Eurosphere: intra-EU openness	1999-2006
c	CMEs in Eurosphere: extra-EU openness	1986-1998	s	SEEs in Eurosphere: extra-EU openness	1986-1998
d	CMEs in Eurosphere: extra-EU openness	1999-2006	t	SEEs in Eurosphere: extra-EU openness	1999-2006
e	CMEs not in Eurosphere: intra-EU openness	1986-1998	u	ALL in Eurosphere: intra-EU openness	1986-1998
f	CMEs not in Eurosphere: intra-EU openness	1999-2006	v	ALL in Eurosphere: intra-EU openness	1999-2006
g	CMEs not in Eurosphere: extra-EU openness	1986-1998	w	ALL in Eurosphere: extra-EU openness	1986-1998
h	CMEs not in Eurosphere: extra-EU openness	1999-2006	x	ALL in Eurosphere: extra-EU openness	1999-2006
i	LMEs in Eurosphere: intra-EU openness	1986-1998	y	ALL not in Eurosphere: intra-EU openness	1986-1998
j	LMEs in Eurosphere: intra-EU openness	1999-2006	z	ALL not in Eurosphere: intra-EU openness	1999-2006
k	LMEs in Eurosphere: extra-EU openness	1986-1998	aa	ALL not in Eurosphere: extra-EU openness	1986-1998
l	LMEs in Eurosphere: extra-EU openness	1999-2006	bb	ALL not in Eurosphere: extra-EU openness	1999-2006
m	LMEs not in Eurosphere: intra-EU openness	1986-1998	cc	ALL intra-EU openness	1986-1998
n	LMEs not in Eurosphere: intra-EU openness	1999-2006	dd	ALL intra-EU openness	1999-2006
o	LMEs not in Eurosphere: extra-EU openness	1986-1998	ee	ALL extra-EU openness	1986-1998
p	LMEs not in Eurosphere: extra-EU openness	1999-2006	ff	ALL extra-EU openness	1998-2006

Source: primary

The intra-EU trade openness trajectories in Figure 14, with the exception of the LMEE (Ireland), exhibit a general increase in the overall internal EU trade volumes, broadening from the 20 to 40 percent band in 1986 to a 20 to 50 percent spread at the time of the launch of the euro, and to the 20 to 60 percent range seen by 2006; by which time Ireland's exceptional trade profile had normalised with the other typologies from about 2003, and had itself entered the 20-60 percent band. As would be expected, the single currency appears to have been a major influence in this significant increase in internal EU trade, although it is also clear that the single market took some time to meaningfully influence the other four groups of national capitalisms until the late 1990s. Nonetheless, a 50 percent increase in intra-EU trade in 20 years must be considered as successful, and although not wholly

conclusive from the trendlines, there is some indication upward movement towards 2007 and beyond.

The extra-EU trade openness illustrations appear to offer a more complex profile, and it is instructive here to examine both the individual typologies' trajectories as well as the overall pattern of activity. As a departure point, Ireland again appears as a significant outlier until 2003, where, as with the intra-Euro trade illustration, it peaks in the early 2000s before converging on the other four typologies in the analysis during the last few years of the 20-year period under review. The first general observation regarding the other groupings is the clear stability demonstrated by all typologies between 1986 and the launch of the euro in 1999, where although externally trading at various levels, all are situated between ten and 30 percent of GDP. After the establishment of the euro, both the Eurosphere and non-Eurosphere CMEs exhibit significant extra-EU trade expansion to 35 percent and 30 percent respectively, while the southern European economies and the UK, as the lone LMENE, appear to settle in the ten to 20 percent band, but without demonstrating any indication of real external trade expansion. The second general observation is effectively a series of questions. First, with the expanding post-euro internal trade openness that was the expected outcome of the single currency and fixed exchange rate for 12 of the 15 national capitalisms of the EU, would this not come at the expense of external trade volumes, given that a concentration on internal trade would become not only simpler and more convenient, but also cost-saving and therefore profit-enhancing? Or, does EMU offer significantly enhanced benefits for external trade as well? And, if this is the case, why is it only the two CME groups that are taking advantage? The answer perhaps lies in the future. Given that the beneficial effects of the SEA on internal EU trade took the best part of a decade to come to fruition, it is not unreasonable to suggest that the pattern for euro-influenced external EU trade may also need a similar gestation period, especially as non-euro trading partners have to reconfigure commercial relationships and make adjustments in relation to the single currency, fixed exchange rate, and other associated transaction costs. Moreover, as newly joined economies of the former Eastern Bloc countries, the Baltic states, and the Small Island economies of Cyprus and Malta, join in the equation, and perhaps also as group protectionism may be deemed necessary to protect an expanded EU trading bloc, the post 2006 patterns and trends may be somewhat different from the period currently being analysed.

The statistical outcomes summarised in Table 21 above offer further insights into EU trade openness in relation to the pre and post-euro phases of the 20-year timeframe under review.

Beginning at the bottom of the table, and in relation to collective analyses, the only collective not demonstrating a statistically significant difference between pre and post-euro is the all non-Eurosphere collective in terms of external EU trade, where it appears that the positive influence of the euro on the CMENE extra trade volumes was partly negated by the LMENE figures. This offers clear empirical evidence that overall the euro has exerted a generally positive change influence across the EU as a whole. However, the picture is less clear when looking at individual typology comparisons via t-testing, and the selected multiple typology ANOVA comparisons. Here, both Eurosphere and ex-Eurosphere CMEs show statistical pre and post-euro difference for internal trade, while the Eurosphere CMEs also demonstrate euro influence on external trade. The other typological groups show no such euro influence on trade. The multiple ANOVA tests are as follows.

The first of the four ANOVA tests looks at all the typologies' intra-EU trade pre-euro, and returns no statistical difference between them. The second ANOVA considers all the typologies' intra-EU trade post-euro, and also finds no statistical difference between them. The third and fourth ANOVAs mirror these tests but for extra-EU trade openness and finds statistically significant difference within the typologies for both periods. Both sets of ANOVA multiple comparison bear out the visual observations from the longitudinal illustrations in Figures 14 and 15, and as discussed above. In sum, out of the 16 statistical tests carried out in relation to EU trade openness, ten return statistically significant outcomes, thereby offering further empirical evidence for the influence of the euro in general, and the supranational management of EMU by the ECB, in particular. However, whilst the evidence is clear that the single currency is having some measurable influence, any more sophisticated insights into causality other than at the surface level, must remain the subject of further research

Summary of the analyses of selected EU economic variables

The foregoing analyses in this chapter have largely focused on the visible longitudinal trends and patterns of various EU macroeconomic indicators, as illustrated in graphic form, and detailed within-and-between statistical analysis of each of the variables has been carried out; where the 'within analyses' tests search for differences in their individual behaviours before and after the introduction of the euro single currency, and the 'between analyses' explore differences and similarities of the prescribed typological groupings of EU national capitalisms over the 20-year period. Moreover, this 20-year period of analysis also allows the

empirical evidence of both longitudinal study and statistical output methods to examine the behaviour of the selected variables over three timeframes: the entire 20-year history; the immediate post-SEA years leading up until the launch of the euro in 1999; and the post-euro period of 1999 to 2006.

These three sub-timeframes, the longitudinal illustrations, and the within-and-between statistical outputs attempt to compile enough empirical economic evidence to promulgate the potential for an EU supracapitalism to exist in the future, that is, sometime after 2006. The establishment of Eurosphere, the ECB as the supranational institution charged with its management, and the single currency as symbolised by the euro, represent a powerful reification of the theoretical planning for EMU as the foundation for the full economic integration which would, perhaps, precede political union. At this stage, however EMU is only two thirds-complete, with the ECB having supranational control of the monetary policy and a fixed exchange rate mechanism for 12 member-states, but not, as yet, fiscal policy.

With the main argument couched in the potential, the above sets of evidence can now synthesised, by looking first at each of the selected macroeconomic variables in turn, and then establishing a preliminary measurement of each variable in terms of their potential for supranational management through the ECB. First, Tables 19 and 20 below together represent a synopsis of all the statistical analysis outputs considered in this chapter. Second, an evaluation of the trends and patterns illustrated in each of the above longitudinal graphs is also presented. And last, a critical assessment of the contrasts and similarities of the behaviour of economic variables within-and-between each of the selected typologies of EU national capitalisms' is offered.

Both Tables 22 and 23 are presented as cross-tabulations, with each of the macroeconomic variables being compared horizontally across the typology-headed columns, and the typologies of national capitalisms, compared vertically across the economic variables. The first table brings together all the individual statistical summaries relating to the statistical testing of each of the variables, and the second table offers a similar synthesis for the collective statistical summaries. The statistical analysis of price stability, as measured by the HICP method, is excluded from the first of these owing to its relatively late adoption within the 20-year timeframe in 1997 and thereby disallowing an effective overall assessment of the pre and-post euro eras for this variable. And, the overall statistical trade openness analysis is

entirely situated in the collective group table due to the unavailability of complete datasets for the SIEs, the FEBNEs, and the BCNEs.

Notwithstanding the noted surface level of causality analysis, both Table 19 and Table 20 reveal significant outcomes of the aggregation of the statistical testing and analysis conducted in this chapter. The first observation from Table 21 is the overall level of statistically significant post-euro change in all the selected macroeconomic variables horizontally illustrated, with the exception of unemployment. And, while the measurement of influence is only returned in statistical difference terms, and therefore not necessarily exhibiting positive or negative influence in the way the visual longitudinal illustrations can, the level of measurement of overall influence at just over 60 percent for the variables suggests that the single currency regime is not only influencing the 12 economies, but that the ECB's supranational management is also changing the behaviours of most of the selected variables for most of the typological groups of capitalisms, and therefore offers some basis from which to support the argument for the potential for an EU supracapitalism. However, when looking at the vertical comparisons of each of the typologies, further dimensions to the analysis are revealed. Here, there is a clear separation of the influence of the euro regime between both the CME groupings and the other typologies in the analysis, with the CMEEs returning only a 43 percent measurement of influence, with only growth, productivity, and inflation being strongly influenced; and the CMNNEs at below 30 percent overall influence, with only inflation and social benefits payments subjected to meaningful change. However, clear influence is evidenced with all the remaining groups, with an average metric of influence of 69 percent. This disparity between the two subsets is interesting, but perhaps explained by the influence of the usually stable trajectories for most economic indicators of the co-ordinated market capitalisms, especially the Eurosphere group, over the ECB's policy-setting agenda and one often seen as emblematic of the German Bundesbank.

Table 22

Analysis of statistical outcomes by typological group and economic variable indicators taken from the statistical summaries tables
(SD = statistically significant post-euro difference, and NSD = no statistically significant post-euro difference. The totals column is expressed as a percentage for difference)

	CME (E)	**CME (NE)**	**LME (E)**	**LME (NE)**	**SEE (E)**	**FEB (NE)**	**SIE (NE)**	**BCE (NE)**	**Total percent**
Growth	SD	NSD	NSD	SD	SD	SD	SD	SD	75.00
Growth per head	NSD	NSD	SD	SD	SD	SD	NSD	SD	62.50
Productivity	SD	NSD	NSD	NSD	SD	NSD	SD	SD	50.00
Inflation – GDP deflator	SD	SD	NSD	SD	SD	SD	NSD	SD	75.00
Unemployment	NSD	NSD	SD	SD	NSD	NSD	SD	NSD	37.50
Social benefit payments	NSD	SD	SD	SD	SD	SD	NSD	NSD	62.50
Direct taxation	NSD	NSD	SD	NSD	SD	SD	SD	SD	62.50
Total percent	42.86	28.57	57.14	71.42	85.71	71.42	57.14	71.42	60.71

Source: primary

Table 23

Analysis of statistical outcomes by collective group and economic variable indicators taken from the statistical summaries tables
(SD = statistically significant post-euro difference, and NSD = no statistically significant post-euro difference. The totals column is expressed as a percentage for difference)

	All national capitalisms within Eurosphere	**All national capitalisms outside Eurosphere**	**All national capitalisms**	**Totals (percent)**
Growth	SD	SD	SD	100.00
Growth per head	SD	NSD	SD	66.66
Productivity	SD	SD	NSD	66.66
Inflation – GDP deflator	SD	SD	SD	100.00
Unemployment	SD	NSD	NSD	33.33
Social benefit payments	NSD	SD	SD	66.66
Direct taxation	NSD	NSD	NSD	0.00
Trade openness intra-EU	NSD	NSD	NSD	0.00
Trade openness extra-EU	NSD	NSD	NSD	0.00
Totals	55.55	44.44	44.44	48.14

Source: primary

Another striking feature of the overall analysis in is the noticeable levels of influence on the non-Eurosphere groups, where even the often-considered most remote economy from the EU, the UK as the LMENE, returns statistical influence on growth; growth *per capita*; inflation; unemployment; and social payment benefits payments. Moreover, the statistical differences which indicate change and influence are usually associated with convergence trajectories as the longitudinal illustrations suggest. This influence on the non-Eurosphere economies can be seen to have both simple and complex dimensions. The simple explanation relates to the general expansion of post-euro intra-EU trade for most economies, and its direct and indirect effects. The complex levels of this influence lie in the many and varied interrelationships national capitalisms enjoy with each other on the bases of bilateral historical, cultural, religious, and military influences on trade and commerce with partners in the EU.

Table 23 summarises the collective analyses in terms of the selected macroeconomic variables, and therefore offers a broader overview of the results as a whole. There are three collectives used in this analysis: an aggregate of all of the Eurosphere national capitalisms of all of the non-Eurosphere national capitalisms, and of all EU national capitalisms as a single group. There is very clear evidence here that EMU, the ECB, and the euro have made little or no overall difference to the EU as a whole in terms of direct government taxation, internal trade (intra-EU trade), or external trade (extra-EU trade). However, with the exception of unemployment, the EU as whole has been significantly influenced in relation to both types of growth, productivity, inflation, and social benefits payments. And, when looking vertically down the columns in Table 22 all the Eurosphere capitalisms are seen to be influenced at around the 56 percent level, while all the non-Eurosphere capitalisms and the EU as a whole are both influenced at about 44 percent. And, interestingly there are identical outcomes for both Eurosphere and non-Eurosphere collectives in terms of GDP growth, productivity, and inflation. Perhaps the collective analysis goes a little further than the individual typologies' analysis, in that internal and external trade, together with taxation are clearly different in their behaviours compared to the other macroeconomic variables, and in this outcome it is reasonable to suggest these three variables may be more politically and historically sensitive, and therefore their trajectories are more independent, and so less sensitive overall to pure macroeconomic supra-management by the ECB.

When considering the longitudinal illustrations and analyses, there appears to be a fairly consistent pattern across all the macroeconomic variables under consideration, regardless of the statistical calibrations of post-single currency difference and associated influence, and

with the exception of GDP *per capita*, where the trajectories are mostly gently and upwardly exponential in trend. The pattern is one where the trajectories either clearly converge following the advent of the euro as with internal EU trade openness, external EU trade openness, overall GDP growth, productivity, unemployment; and both measurements of inflation; or where convergence is not evidenced, they move closer together following the launch of the single currency but whilst maintaining similar pre-euro profiles, as is the case with both direct government taxation and social benefits payments.

The similarities and differences between the selected typologies of national capitalisms in relation to the overall analysis are encapsulated at one level in Tables 22 and 23 above, where the horizontal statistical responses to the macroeconomic variable testing shows that the typologies as a whole have significantly and similarly responded to the single currency and ECB's supranational management of monetary and exchange rate policy constructs. The vertical comparisons in the table, as noted above, illustrate a clear difference between the CMEs and the other typologies. However, if the analysis was relaxed a little, it could be argued the only real outlier group is the non-Eurosphere co-ordinated market economies of Denmark and Sweden, and that may be reconciled by considering how their much higher and very stable direct government taxation levels may more readily negate some of the indirect effects of the single currency experienced by all the other non-Eurosphere typologies.

Moreover, the original composition of the typologies is one of contingently-qualified arbitration at best, and it would be very difficult, if not impossible, to find an optimum method of fitting individual national capitalisms into collective varieties of national capitalisms that would satisfactorily offer a basis for a broad range of politico-economic interrogations. However, as the above comparisons between the typological responses in Table 22 and the collective EU responses in Table 23 suggest, that although there will always be a residual amount of statistical 'noise' or 'error' because of the n = 1 problem discussed earlier, practical contingent or issue-specific compositions of national capitalisms do offer significant analytical advantages when attempting to view the potential progress of EU capitalism as a whole.

Chapter 5 The evolution and performance of the ECB

Overview

In the preceding passages the ECB and the Eurosphere have, at times, been used both interchangeably and synonymously. This seems reasonable given that both were created at the same time, and for the joint purpose of the commencement of Stage Three of EMU. Moreover, the Eurosphere can be seen as a clearly defined politico-economic space, where the participating members *of* the single currency are interrelated in that membership *by* the collective control of the ECB. Nonetheless, the ECB is charged with the supranational strategic management of the euro, and as such much of the individual and collective economic and monetary performance of the Eurosphere countries. And, as the ECB has also been positioned as the key economic agent and major political influence for the concept of an EU form of supracapitalism here, it becomes the overall analytical focus from which to assess the macroeconomic performance of the Eurosphere and the degree to which an EU supracapitalism is a genuine possibility. Therefore, although the development of the Eurosphere since 1999 also informs elements of this chapter, the main focus is on the evolution and effectiveness of the ECB itself. And importantly, such a focus not only allows the empirical evidence presented in the previous chapter to be critically evaluated against both the ECB's existing primary and ancillary policy objectives, but also crucially for the propositions made here to challenge the basis and narrowness of ECB monetary policy-setting by propounding the heterodox monetary production model as a more effective means of managing the Eurosphere..

Any meaningful adjudication of the ECB's supra-institutional performance is contingent upon an appreciation of its nature and characteristics, and, in turn, these can probably be best understood by chronicling its evolution. The unfolding story of the ideas, creation, and eventual realisation of the ECB directly relates to the concept of economic integration being a necessary prerequisite for the full political union the founding fathers of the EU envisioned. And economic integration was predicated on economic *and* monetary union, which the ECB would ultimately be mandated to deliver.

Whereas any assessment of ECB's performance can obviously only be made following its full operationalisation in January 1999, its evolution can be seen to have begun with the enactment of the Treaties of Rome in 1958. A more recent staring point may possibly be

1989 when the European Council decided to initiate the realisation of EMU by the end of the century. However, it would be historically incorrect to disregard the first steps towards monetary integration, which began in the mid-1960s (Scheller, 2004). These early attempts were characterised by varying degrees of success, but where progress was often punctuated with setbacks. Nevertheless, the achievements of this period, and some of the lessons learned, were indispensable in shaping the process of the monetary integration that began in the 1990s. With this in mind, perhaps the most practical departure point for ECB's history would be 1962 and the *Marjolin Memorandum* (See Table 10a below). Here, the memorandum initiated the first discussions on monetary integration at the Community (EEC) level, and prompted the first, although limited, measures in the area of monetary co-operation. So, with an evolution timeframe now defined between 1962 and 2006, ECB's history can be viewed as having two stages, where a number of distinct phases of ECB history can be identified, and each with its own definable developmental moments. There is a pre-history between 1962 and 1998, where there is a theoretical and political discussion period resulting in Stage One and Stage Two of EMU; and from 1999 until 2006, an operational record which saw the implementation of a strategy based on Stage Three of EMU, and therefore the policies and decision-making characterising the first seven years of ECB's development. Tables 24a and 24b below summarise the main developments. Following an account of the events leading up to the operationalisation of the ECB and launch of the euro, the chapter evaluates the progression of the ECB by looking first at its political landscape and potential tensions, then by considering ECB's economic challenges, before finally assessing its performance between 1999 and 2006. In doing so, elements of constructivist analysis are used to appreciate the developments of the pre-history stage, whereas neoinstitutionalist perspectives help make sense of the early ECB years in terms of its politics, economics, and overall macroeconomic performativity.

A pre-history of the ECB

Although the EU's founding fathers perceived economic integration as a necessary precursor to full political union from the early 1950s, and that monetary co-operation was seen as the initial condition of that economic assimilation, it was not until the end of the 1960s, that the European Commission drew up plans for its realisation. Up until this time the Bretton Woods system had maintained a relatively stable and well-functioning international monetary mechanism. However, the system began to show significant strain as a result of US balance

of payments policy, and because of several exchange rate and balance of payment crises, the EEC members differed on economic policy priorities. In turn, this threatened to disrupt the

Table 24a

The evolution of the Eurosphere 1962-1995

During 1962	The European Commission makes its first proposal (Marjolin Memorandum) for economic and monetary union
May 1964	A Committee of Governors of the central banks of member-states of the EEC is formed to institutionalise the co-operation among EEC central banks
During 1971	The Werner Report sets out a plan to realise an economic and monetary union in the EEC by 1980
April 1972	A system (the snake) for the progressive narrowing of the margins of fluctuation between the currencies of members states is established
April 1973	The European Monetary Co-operation Fund (EMCF) is set up to ensure the proper operation of the snake
March 1979	The European Monetary System (EMS) is created
February 1986	The Single European Act (SEA) is signed
June 1988	The European Council mandates a committee of experts under the chairmanship of Jacques Delors (the 'Delors Committee') to make proposals for the realisation of EMU
May 1989	The 'Delors Report' is submitted to the European Council
June 1989	The European Council agrees on the realisation of EMU in three stages
July 1990	Stage One of EMU begins
December 1990	An intergovernmental Conference to prepare for Stages Two and Three of EMU is launched
February 1992	The Treaty on European Union (TEU) known as the 'Maastricht Treaty' is signed
October 1993	Frankfurt is chosen as the seat of the European Monetary Institute (EMI) and of the ECB
November 1993	The TEU comes into force
December 1993	Alexandre Lamfalussy is appointed as President of the EMI, to be operational from January 1994
January 1994	Stage Two of EMU commences
December 1995	The Madrid European Council decides on the name of the single currency and sets out the plans for its adoption and cash changeovers

Source: adapted from Scheller (2004)

Table 24b

The evolution of the Eurosphere 1996-2006

December 1996	The EMI presents specimen euro banknotes to the European Council
June 1997	The European Council agrees on the Stability and Growth Pact
May 1998	Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain are considered to fulfil the necessary conditions for the adoption of the euro as their single currency. The members of the Executive Board of the ECB are appointed
June 1998	The ECB and the European System of Central Banks (ESCB) are established
October 1998	The ECB announces the strategy and operational framework for the single monetary policy it will conduct from 1st January 1999
January 1999	Stage Three of EMU begins; the euro becomes the single currency for the Eurosphere; conversion rates are irrevocably fixed for the former national currencies of the participating member-states ; and a single monetary policy is accepted and conducted for the Eurosphere
January 2001	Greece becomes the 12th member state to join the Eurosphere
January 2002	The euro cash changeover takes place. New euro banknotes and coins are introduced and become the sole legal tender in the Eurosphere by the end of February 2002
May 2004	The national central banks (NCBs) of the ten new EU member-states, the 'Fifth Enlargement', Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia, join the ESCB
2004-2006	The ECB and Eurosphere fully operational

Source: adapted from Scheller (2004)

hitherto effective running of the customs union and common agricultural market. Deciding to push forward plans to now create a new monetary identity and move towards the realisation of economic and monetary integration, the Council of Ministers commissioned the *Werner Report*[16] which outlined a scheme to deliver economic and monetary union in a number of stages, and by 1980.

[16] The Werner Report was prepared by a group of experts under the chairmanship of Pierre Warner, Luxembourg's Prime Minister, and published in 1970.

The first of these stages was designed to ensure the 'progressive narrowing of the fluctuations or members states' currencies' (Scheller, 2004). The system, known as the 'snake'[17], came into operation in 1972, and was organised alongside the newly-formed European Monetary Co-operation Fund (EMCF). In what could be viewed as the forerunner to the now European System of Central Banks (ESCB), the EMCF was effectively a first attempt at organising the EU central banks into a co-operative. From this platform it was envisaged that a high degree of currency convergence and a plan for stability, growth, and full employment could be achieved. However, by the mid-1970s the process of integration had lost its momentum under divergent policy member-states' responses to the international economic shocks of the period. The EMCF evolved into an exchange rate mechanism involving the currencies of West Germany, Denmark, and the Benelux countries, together with two outsider currencies; the Swedish krona and the Norwegian krone. By 1977, this had effectively become a Deutsche Mark zone, and also perhaps the first indication of the dominant role the German central bank, the Bundesbank, was to play in the development of the ECB.

The net result of the divergent policy decisions and uncertainty surrounding the snake led first to proposed interventions in the snake in order to maintain the fixed and narrow currency convergence, especially against the US dollar; and then varying degrees of involvement in the system with countries leaving and re-entering the snake mechanism at different times; notably France and Italy. Consequently, most of the other members kept their currencies outside the system for all or most of its existence, and as a result the EMCF became merely a book-keeping organ, with member-states and their central banks increasingly reluctant to adopt it in their respective policy formations.

In March 1979 the process of monetary integration was relaunched with the creation of the European Monetary System (EMS). The EMS was established by a Resolution of the European Council, and its operating procedures were laid down in an agreement between the participating central banks. The EMS proved to be instrumental in furthering European monetary integration. Unlike the snake, the EMS managed to keep most EEC currencies in a single exchange rate system. Some features of the EMS were similar to the snake, for example the EMS was also built around a grid of fixed but adjustable central rates among the participating EEC currencies. A new feature, however, was the introduction of the European

[17] The analogy of the snake, or the snake in the tunnel, refers to a set band of European currencies within plus or minus of 2.25 percent of their relative exchange rate against the US dollar, effectively allowing a potential 4.5 percent appreciations or depreciations

Currency Unit (ECU), which was defined as a 'basket' of fixed quantities of the currencies of the member-states. The ECU was to serve as the 'numeraire' of the exchange rate mechanism (ERM), as a unit of account to denominate operations in the intervention and credit mechanisms, and as a reserve asset and means of settlement among the participating central banks.

However, the EMS was not just an exchange rate mechanism. In line with its objective to promote internal and external monetary stability, the EMS also covered the adjustment of monetary and economic policies as tools for achieving exchange rate stability. Its participants were able to create a zone in which monetary stability increased, and capital controls were gradually relaxed. The exchange rate constraint greatly helped those participating countries with relatively high rates of inflation to pursue disinflation policies, in particular through monetary policy. It therefore fostered a downward convergence of inflation rates and brought about a high degree of exchange rate stability. This in turn helped to moderate cost increases in many countries and led to an improvement in overall economic performance. Moreover, reduced uncertainty about exchange rate developments, together with a perception that the parities of the participating currencies were not allowed to depart significantly from the economic fundamentals protected intra-European trade from excessive exchange rate volatility.

Although the EMS became the focal point of improved monetary policy co-ordination, its success in bringing about greater convergence of economic policies was rather limited. The lack of sufficient convergence in fiscal policy also remained a source of tension: some countries had persistently large budget deficits (leading to several exchange rate crises at the beginning of the 1990s), which put a disproportionate burden on monetary policy.

A further impetus for economic and monetary union was provided by the adoption of the Single European Act (SEA), which came into force on the 1st of July 1987. The main purpose of the SEA was to introduce the Single Market as a further objective of the EEC, in order to make the necessary decision-making changes to complete the Single Market and to reaffirm the need for the EEC's monetary capacity for achieving economic and monetary union.

There was growing consensus among policy-makers that a market without internal borders would link the national economies much more closely together and significantly increase the degree of economic integration within the EEC. This, in turn, would reduce the room

for manoeuvre of national policies and thus oblige the member-states to step up convergence of their economic policies. If greater convergence did not occur, full freedom of capital movements and integrated financial markets was expected to put an undue burden on monetary policy. The integration process would therefore require more intensive and effective policy co-ordination for which the prevailing institutional framework was perceived to be insufficient. In addition, the Single Market was not expected to be able to exploit its full potential without a single currency. A single currency would ensure greater price transparency for consumers and investors, eliminate exchange rate risks within the Single Market, reduce transaction costs and, as a result, significantly increase economic welfare in the EEC.

Taking all these considerations into account, the then 12 member-states of the EEC decided in 1988 to relaunch the EMU project. Where the Werner Plan of the early 1970s had failed, the second attempt at EMU would prove to be a success, finally turning the single currency dream into reality. In June 1988 the European Council confirmed the objective of the progressive realisation of economic and monetary union and instructed a committee chaired by Jacques Delors, President of the European Commission, to propose 'concrete stage's leading to EMU. The resulting *Delors Report* of 17 April 1989 recommended that economic and monetary union be achieved in 'three discrete but evolutionary steps' (Scheller, 2004).

Stage One was to focus on completing the internal market, reducing disparities between Member-states' economic policies, removing all obstacles to financial integration and intensifying monetary co-operation. Stage Two would serve as a period of transition to the final stage, setting up the basic organs and organisational structure of EMU and strengthening economic convergence. And, in Stage Three, exchange rates would be locked irrevocably and the various Community institutions and bodies would be assigned their full monetary and economic responsibilities.

Although Stage One was established within the existing institutional framework of the Community, changes to the institutional structure were needed for Stages Two and Three. It was necessary therefore to revise the Treaty establishing the European Economic Community. To this end, an Intergovernmental Conference (IGC) on EMU was convened, which opened in November 1990 in parallel with the IGC on European Political Union. At the European Council's invitation, the EMU IGC was prepared by the Council of Ministers, the European Commission, the Monetary Committee, and the Committee of Governors, all within their respective fields of competence.

The outcome of the IGC negotiations was the Treaty on European Union (the EU Treaty, commonly known as the Maastricht Treaty), which was signed in Maastricht on 7 February 1992. The EU Treaty established the EU and amended the founding treaties of the European Communities. The amendments to the EEC Treaty added, among others, a new chapter on economic and monetary policy. This new chapter laid down the foundations of EMU, and set out a method and timetable for its realisation. Reflecting the Community's increasing powers and scope, the EEC was renamed the European Community. The Statutes of the European System of Central Banks (ESCB), the European Monetary Institute (EMI), and the ECB, were attached as Protocols to the EC Treaty. Denmark and the United Kingdom were given a special status that did not oblige them to participate in Stage Three of EMU.

On the basis of the *Delors Report*, the European Council decided in June 1989 that the first stage of the realisation of economic and monetary union should begin on the 1st of July 1990. This was the date on which, in principle, all restrictions on the movement of capital between member-states were to be removed. At this time, the Committee of Governors of the central banks of the member-states of the EEC was given additional responsibilities, which were set out in a Council Decision of 12 March 1990. They included holding consultations on, and promoting the co-ordination of, the monetary policies of the Member-states, with the aim of achieving price stability. In view of the relatively short time available and the complexity of the tasks involved, the Committee of Governors initiated the preparatory work for Stage Three of EMU as soon as the Maastricht Treaty had been signed. The first step was to identify all the issues that should be examined at an early stage and establish a work programme by the end of 1993. Then it was necessary to define appropriate mandates for the existing sub-committees and the new working groups which had been set up to look into specific issues.

The establishment of the EMI on 1 January 1994 marked the start of Stage Two of EMU. It was created as a transitory body to undertake the preparatory work for Stage Three of EMU, while the conduct of monetary and exchange rate policy in the EU remained the preserve of national authorities. The Committee of Governors ceased to exist but was effectively reconstituted as the Council (governing body) of the EMI. The two main tasks of the EMI were to strengthen central bank co-operation and monetary policy co-ordination; and to make the necessary preparations for establishing the ESCB, for the conduct of the single monetary policy, and for creating a single currency in the third stage of EMU.

In December 1995 the Madrid European Council confirmed that Stage Three of EMU would start on the 1st of January 1999. It also named the single currency to be introduced at the start of Stage Three as the euro, and announced the sequence of events leading up to its introduction. This scenario was mainly based on detailed proposals developed by the EMI, which had also used the term 'changeover to' the euro instead of 'introduction of' the euro in order to reflect the nature of the transition to the single currency. The EMI's changeover scenario recommended a transitional period of three years starting from the 1st of January 1999 to accommodate differences in the pace with which the various groups of economic agents, for example, the financial sector, the non-financial corporate sector, the public sector, and the general public would be able to adapt to the single currency. Also in December 1995, the EMI was given the task of carrying out preparatory work on the future monetary and exchange rate relationships between the euro and the currencies of the non-euro area EU countries. One year later, in December 1996, the EMI presented a report to the European Council, which subsequently formed the basis of a European Council Resolution on the principles and fundamental elements of the new exchange rate mechanism (ERM 11), which was adopted in June 1997.

In December 1996 the EMI presented to the European Council, and to the public, the blueprint that had won the euro banknote design competition, and that would therefore feature on the banknotes to be put into circulation by the ESCB on the 1st of January 2002. The design of the euro coins which were to be issued by the Eurosphere member-states was endorsed by the European Council in 1997. In June 1997 the European Council adopted the Stability and Growth Pact (SGP), which complemented the Treaty provisions and aimed to ensure budgetary discipline within EMU. The Pact consists of three instruments: a European Council Resolutions and two Council Regulations. It was supplemented and the respective commitments enhanced by a Declaration of the Council in May 1998.

The member-states implemented policies to fulfil the economic convergence criteria (Article 121 of the EC Treaty) and revised extensively their national legislation to bring it into line with the requirements of legal convergence (Article 109 of the EC Treaty). The adaptations concerned in particular the legal and statutory provisions for their central banks with a view to their integration into the Eurosphere. The final decisions on EMU were taken starting in May 1998. On the 2nd of May 1998 the EU Council, meeting in the composition of the Heads of State or Government, decided unanimously that 11 member-states had fulfilled the conditions necessary to adopt the single currency on 1 January 1999. These countries

(Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland) would therefore participate in Stage Three of EMU. Given their special status, Denmark and the United Kingdom 'opted out' of Stage Three of EMU, and Greece and Sweden were not deemed to have met the conditions for adopting the single currency.

The Heads of State or Government also reached a political understanding on who to appoint as members of the future ECB's Executive Board. At the same time, the ministers of finance of the member-states adopting the single currency and the governors of the national central banks of these Member-states agreed, together with the European Commission and the EMI, that the current ERM bilateral central rates of the currencies of the participating member-states would be used to determine the irrevocable conversion rates for the euro.

The six members of the Executive Board were appointed with effect from the 1st of June 1998 when the ECB was established. The EMI had completed its tasks and went into liquidation in line with Article 123(2) of the EC Treaty. The ECB, as liquidator of the EMI, inherited not only an extensive body of preparatory work but also the whole EMI infrastructure, including a body of staff which had been prepared to undertake its duties at the ECB. This greatly helped the ECB to make the Eurosphere operational within only seven months, i.e. in time for the start of Stage Three, and to complete the preparations for the euro cash changeover by the 1st of January 2002.

The pre-history of the ECB therefore can be seen as the result of on-going ideas and resulting discourse, in a constructivist sense; and the subsequent establishment of the ECB based on rules, continual change by process, and an interdependent embeddedness, within neoinstitutionalist logic. With the ECB in place, the focus can now critically turn to the impact of the early politics and economics of its decision-making and policy implementations.

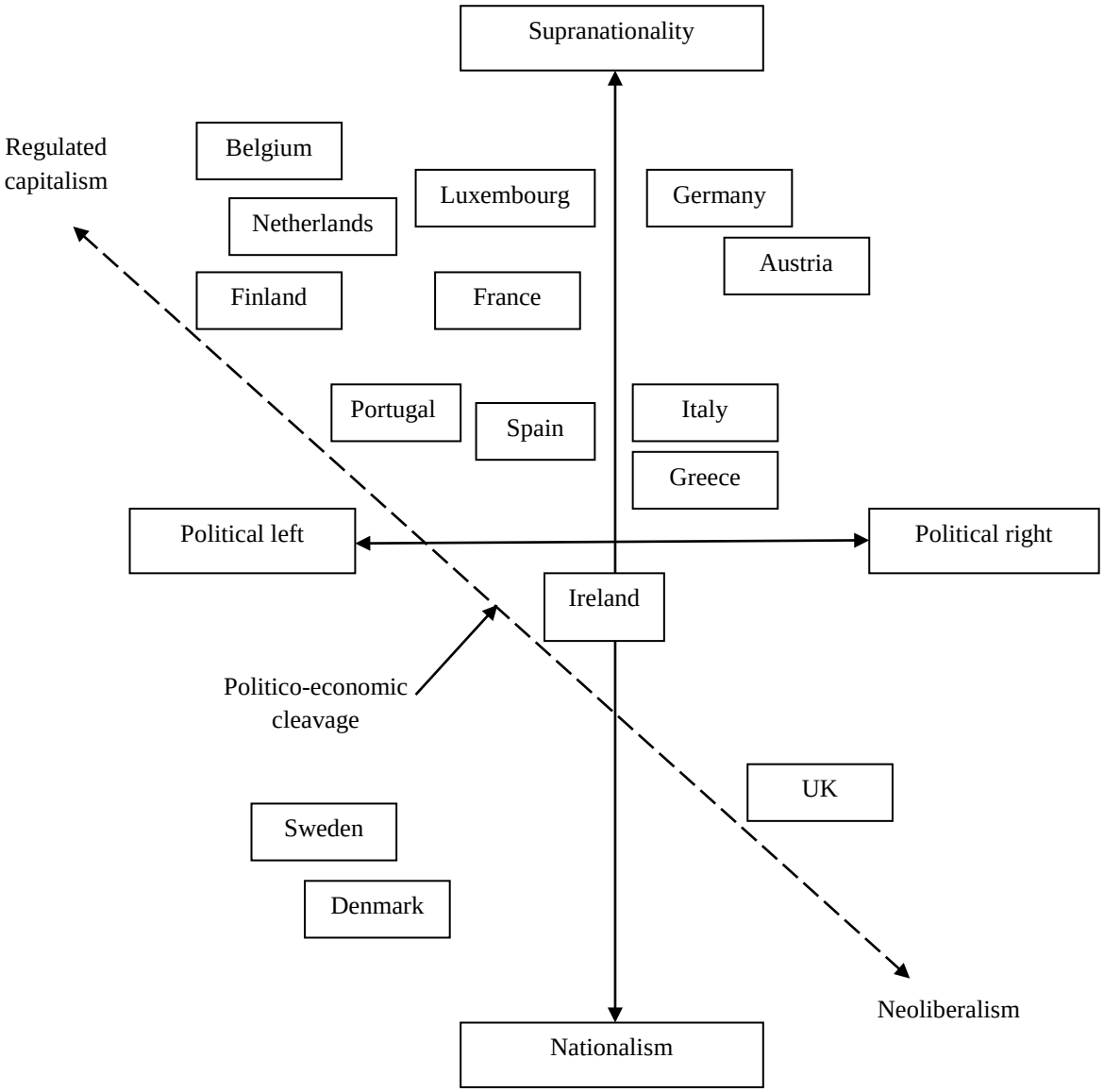
The politics of ECB decision-making

The politics of ECB decision-making can first be understood by considering an overview of the political economy of the EU at the time the ECB operationalised. Sometimes referred to as EU 'spaces of contestation', Hooghe and Marks (1999:77) see these spaces as representing the political climate in which the ECB first found itself, and Figure 16 below illustrates this. Here, the horizontal axis represents the member-states' domestic political positions on the left-right political spectrum in relation a vertical plane which calibrates levels of member-states' adherence, or willingness to adhere to (or resist), supranational governance by the ECB. By the quadrantile positioning of each member state within the two planes, a visual

overview of the political economy is offered. In addition, Hooghe and Marks identify a third continuum, or linear cleavage, within the space. This represents the relationship between those member-states that advocate an EU-regulated capitalism with those who privilege less regulation of capitalism in favour of a neoliberal propensity for the market mechanism. This immediately raises a number of key points. First, although there are only two identifiable member-states which fall into the second category, Ireland and the United Kingdom (UK), although this does not mean that the remaining 13 national economies are in concert as regards levels of regulation, nor for that matter, can their positions be considered static. Here, if we now move from this projected 13-2 split, to the 12-3 division that exists between the Eurosphere countries and those outside the single currency, a different cleavage is created where member-states are seen to change positions: Ireland moving into the 'ECB regulated' zone, and Denmark and Sweden joining the UK in the less-regulated domain characterised by independent national central banks and national control of monetary and exchange rate policy. Third, the cleavage would again have to be repositioned if fiscal policy stances were to be represented. Here, with all the 15 members having national control over government spending and borrowing, the sloping line would appear entirely below the horizontal axis, with its gradient relating to members' adherence to the SGP's constraints. Clearly, France and Germany would now occupy positions at the non-regulated end of the line, and indeed, further away from the supranational pole of the vertical axis. Fourth, the left-right continuum, along which represents the social-democratic member-states to the left, with the neoliberals to the right, shows the Christian democrats occupying the centre ground. In relation to the vertical national-supranational axis, the cleavage in Figure 16 suggests that left-leaning national capitalisms tend to be more in favour of a regulated or supranational capitalism, and their neoliberal counterparts tending towards more national control of their economies. However, with left-leaning nationalists in the Danish Social Democratic party and right-leaning supranationalists immanent in the German Christian Democrat movement (Hooghe and Marks 1999), it becomes clear that employing the original Hooghe and Marks cleavage does not encompass all actors, and suggests there are a number of further issue-specific spatial contestations to consider. Moreover, the agents operating within these spaces are likely to be more fluid in terms of the tenure of their positions, thereby rendering the spaces of contestation, as illustrated, a continuing dynamic, as both individual member-states change governments and political hue, and as the members of the recently acceding collective of ten new EU national economies inevitably join the single currency and the Eurosphere significantly expands

Figure 16

Spaces of EU politico-economic contestation



Source: adapted from Hooghe and Marks (1999:77)

Baldwin *et al* (2001) argue that although there is precious little time between the new members' accession and their joining the euro, and there exists an apparent unpreparedness on the part of the ECB. This, in turn, highlights a more fundamental issue; that of the ECB's

decision-making mechanism pre and post-euro enlargement. At stake is not only the credibility of ECB, itself a holy grail amongst central banks, but also the relative power of the new members as a collective voting force in ECB policy-making strategy.

Under the current rules, the central bank governor of each new EU member gets a vote on the Governing Council. For example, as at 2002, the ECB President of a board of six executives sits with the twelve existing central bank governors, each with a vote. This means that a simple majority for any proposed interest rate change requires a majority of nine plus the President's vote will win the day. Effectively, the President and his board need only to persuade three other central bank governors to pass a particular rate. The weighting of each individual member's economic contribution is not taken into account. The implication of this is that when say, all ten new members join the euro, the board will need to sway the votes of at least seven members to pass the recommended rate. Of course, there will be not only a broader mix of national bias, but also the potential for increased cohorts of interest groups' tactical voting. Under the present system, the relatively small economies of Estonia, Latvia and Lithuania will be able to outvote Germany and France, who between them account for about 50 percent of the total GDP of the EU. Baldwin *et al* (2001) offer a simple example.

> Consider a very simple EU made up of two countries, one rich, one poor, with the rich country's GDP being four times that of the poor one. Furthermore, assume inflation is zero in the rich nation, but because of the Balassa- Samuelson effect[18] it is ten percent in the poor country. Using GDP 'weights', the average inflation in this simplified EU would be 2 percent (0 percent x 0.8 + ten percent x 0.2). Now consider the situation facing the ECB. To keep inflation below 2 percent the ECB must do one of two things: force deflation in the rich country via a recession, or force the poor country's growth below its long-term potential. Most likely, the application of the tools available to the ECB *vis a vis* monetary tightening would lead to some of both; a highly undesirable outcome (2001:28)

On top of this there is the matter of national central bank governors demonstrating a voting bias relative to their home country conditions. Although not always at surface level, elements of national bias will always be present, and there is also potential for further sub-groupings of

[18] The Balassa-Samuelson effect stems from the fact that poorer nations have lower price levels than rich nations, Although the prices of traded goods do not differ much from those in rich nations, the prices of non-traded goods, especially construction and labour-intensive services, are typically lower because wages are lower. As productivity, income and wages catch up, so do the non-traded goods prices. This means poorer countries will have higher and *different* inflation rates as increased growth is achieved.

collective bias(es) to exist, and these will also be therefore interchangeable. This suggests, in essence, a 'preference fluidity' of members' allegiances contingent on specific economic and political issues. Baldwin *et al* (2001) consider this by looking at hypothetical alliances within two stages of an enlarged Governing Council.

The first assumption drawn in the hypothesis is that in a post-enlargement ECB, the six board members only care about Eurosphere inflation; that is they have no national bias. Here, Eurosphere inflation would be the average of national inflation rates, where the averaging uses weights (GDP weights) that are related to the economic size of member nations (See Table 25). Baldwin *et al* (2001:33), then assume that all the national central bank governors adopt 'an extreme Machiavellian' view, in that they only care about their *national* inflation rates. The second assumption is that there are a few 'core' economies that dominate the EU collective GDP, (France, and Germany together account for more than half of EU GDP). At the present time, with twelve members in total, seven countries represent this core: Austria, Belgium, France, Germany, Italy, Luxembourg, and the Netherlands. With Denmark, Sweden and the UK still outside the Eurosphere, and the remaining five economies of Finland, Greece, Ireland, Portugal and Spain are considered as 'less synchronised' in terms of their collective voting behaviour. This means that the Executive Board will find natural voting allies among the core economies - even if all governors take purely national perspectives (Baldwin *et al*, 2001:33). Under these conditions governing council decision-making is relatively smooth because the Eurosphere average is dominated by six nations whose macroeconomies are relatively synchronised.

The first stage of enlargement is likely to see five of the ten new acceding member-states join the euro; Czech Republic, Estonia, Hungary, Poland and Slovenia. The second wave, which would probably be more gradual, could see Cyprus, Latvia, Lithuania, Malta, and Slovakia sign up. In addition to these accepted at the Nice summit, Bulgaria, Bulgaria, and perhaps Turkey, are also expected to accede in the medium-term. The first additions would give the ECB a 23-vote polity (6 board plus 17 governors) thereby shifting the balance of the Executive Board plus the core economies over the less synchronised members from 72 percent (6+7/18) to 56 percent (6+7/23). At this point, it becomes clear that not only would the balance of voting power shift under the existing structure, but also the asynchronicity of the ten countries may evaporate, and new sub-groupings of alliances emerge. For example, by voting together as a single cohort of ten they would only have to persuade two of the core voters to move with them in order to outvote the board. Or, a grouping of eight out of the ten,

say, of the faster-growing economies could collaborate against any potential increases in interest rates which may be favoured by the board to maintain the EU average inflation rate below the 2 percent target. The second stage of enlargement could swell euro membership to 22 economies. This would then comprise 30 votes and, more significantly, move the balance of voting power away from the board core alliance to (6+7/30) to 43 percent. This advantages the 'less synchronised' economies to 57 percent of the votes, and enough therefore, in theory, to dictate interest rates.

This image of a straightforward and transparent voting mechanism is, however, deceptive and does not, as Baldwin *et al* (2001) argue, allow for the complexities of ECB decision-making. Central to these complexities is 'status quo bias' and a brief consideration of this is relevant to the foregoing. In the light of the preference fluidity of members identified above, Baldwin *et al* (2001:35) suggests that the President, backed by the Executive Board, sets the agenda for decision-making meetings. Now, on the one hand, it is assumed that each member state knows its own ideal interest rate at any given moment, and it also knows that its ideal interest rate will change in the future. The Executive Board is interested in the Eurosphere average, so if the individual Eurosphere members have correctly calculated their ideal rates, the Board's ideal interest rate is a weighted average of member-states' ideal interest rates at any given time. On the other hand however, if the President and the Board chooses to propose a rate that they feel is more likely to win the vote, than a rate that is the ideal rate for Eurosphere, and that rate is only as close as the board feels it can get to the ideal, then it is feasible that it will not be the ideal rate for the major part of the Eurosphere economy in GDP terms, but may be the rate acceptable to the majority of voters.

Although this illustration is used by Baldwin *et al* in support of an argument for ECB reform sooner rather than later, that is before enlargement, it is employed here to demonstrate how the constructivist approach allows a positioning of the ECB's policy strategy formulation between the 'thick end' of constructivism, where certain strategies are favoured by the institutional actors over others regardless of the actors themselves, and the 'thin end' where elements of neorealism may be identified through national bias in such strategy formulation. Of course, it can be argued that as EU supranationalism increasingly overarches national preferences, policy and strategy formulations should commensurately become more socially constructive in nature, that is at the 'thick end' of constructivism and national bias will be gradually eroded, although not eliminated altogether.

The economics of ECB decision-making

Among the criticisms aimed at ECB policy regarding interest rate setting, one of the most important, and one crucial in terms of enlargement, is the target band of 0 percent to 2 percent that the ECB, since its inception, has focused nearly all its attention upon. De Grauwe (2002:697) argues that there are several reasons why the *maximum* (original emphasis) inflation target of 2 percent is too low. First, some economists believe that a little (modest) inflation is good for the economy because it provides an element of lubrication. This means that workers not only have the feel-good effect of seeing their wages rise, if only in line with retail prices, but that it allows for increased flexible adjustments in real wages, De Grauwe (2002:697). This lubrication, in turn, reduces the equilibrium level of unemployment, (Akerlof *et al* 2000). Some economic analysts have therefore called for a rate of inflation of 2-3 percent a year. By keeping the inflation rate rigidly, at, or below, 2 percent, the ECB is increasing unnecessary rigidities in the economy by performing at below optimal level. It must, however be stressed that other economists argue that this money illusion effect of lubrication may well disappear in a new regime of low inflation where low rates of inflation will not need it.

Another reason why the 0-2 percent band is too low is that the inflation rate is, or could be, pushed too close to zero. The current deflationary situation in Japan where prices are continuing to fall in a downward spiral is considered a much worse 'evil' than an upward movement in inflation. This is because there is so little room for central bank manoeuvre; Japan now has a 0 percent overnight rate and with deflation persisting can, obviously go no further with this policy instrument. De Grauwe (2002) also reasons that if the ECB is successful in pushing the inflation rate within the 0-2 percent band, it will be inevitable with an enlarged Eurosphere membership of 22 that this rate will be an average rate and as such inflation would drop below 0 percent in some countries. Moreover, if this were to happen it would be the existing low growth-low inflation countries that would be at greatest risk. This also brings sharply into focus the fact that the within the ten accession economies there are differing levels of relationships between inflation and growth, consider the analysis of, say, Poland and Cyprus in Figure 17 below. Both countries have grown at an average of 4.2 percent a year over the 5 year period, however Poland's average inflation for the same period is 9.2 percent compared to 2.7 for Cyprus; over three times the rate. The obvious question is what can the ECB do to manage both of these divergent economies with so little room to manoeuvre?

The different growth-inflation profiles illustrated in Table 25 also introduce another concern: the Balassa-Samuelson effect. This is where less developed countries may experience, as are the EU enlargement countries, high productivity growth in their tradeable goods sector which generates a non-inflationary increase in wages which spreads to the less productive non-traded goods sectors. This means that inflation, measured as it is by the ECB using the Harmonised Consumer Index of Prices (HCIP), will be higher again in the growth economies than in the more mature national economies, thereby compounding the existing differentials. A clear example can be found by comparing Hungary with the UK. As at the end of January 2003 both economies were growing at 3.4 percent (*The Economist*, 18/1/03 pp.98-ten0) but Hungary's consumer prices were rising at 4.8 percent, 2.53 times the 1.9 percent rate in the UK. Therefore, the ECB's problem with such a narrow inflation target band is in danger of becoming exponentially compounded.

The ECB's perception of the relationship between monetary growth and inflation is also a concern to academics. The problem here is that the linear relationship between the two adopts varying properties between a grouping of 30 low inflation countries and a more universal 30-country sample analysis. Again, De Grauwe (2002:705) argues the point by drawing attention to the contrast in the empirical evidence between the two samples using M1 monetary growth. In the universal sample there is a clear correlation between M1 stock and inflation up to about 40 percent money growth and 30 percent inflation, and this is the basis upon which the ECB appears to focus in pillar one of its policy strategies. However, when a sample of 30 low-inflation countries is compared, it is very difficult to see any definable best fit correlation, although above 3 percent inflation and including a wide 0 percent to14 percent M1 growth band, there is a very approximate upward 'scatter'. What is significant, and challenges the ECB policy line, is that below inflation of 3 percent at all M1 growths there is no correlation (See Figure 17 below).

Finally, the ECB's record on inflation itself would suggest that the narrow band is both unrealistic and problematic. From January 1st 1999 until April 2002, the Eurosphere inflation pattern has fluctuated between 1.5 percent above and approximately 1.5 percent below the target of 2 percent, and has been outside the target band more than 60 percent of the time. These observations indicate that a more flexible target band of 2 percent as the *mid-point*, thereby allowing the 1.5 percent fluctuations already observable is a more realistic and credible strategy

Table 25

Inflation and GDP growth in accession countries 1997-2002

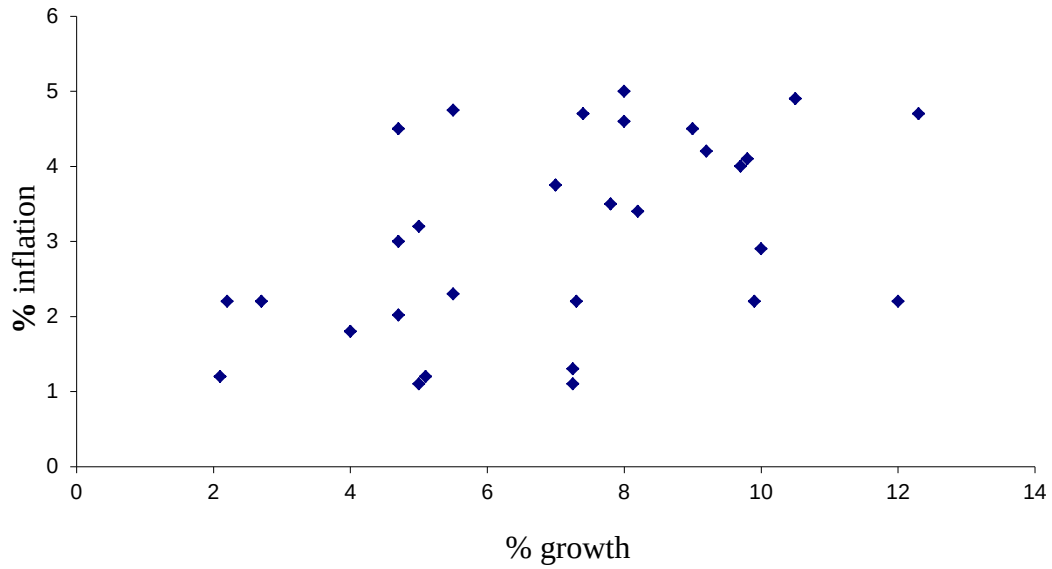
	Inflation							Growth						
	97	98	99	00	01	Av.	02*	97	98	99	00	01	Av	02*
FEBEs														
Czech Rep	8.0	9.7	1.8	3.9	4.5	5.6	3.2	-0.8	1.0	0.5	3.3	3.3	1.1	2.5
Hungary	18.5	14.2	10.0	10.0	9.1	12.4	6.8	4.6	4.9	4.2	5.2	3.8	4.5	2.9
Poland	15.0	11.8	7.2	10.1	5.3	9.9	3.1	6.8	4.8	4.1	4.0	1.1	4.2	0.5
Slovakia	6.0	6.7	10.8	12.3	N/a	N/a	N/a	5.6	4.0	1.3	2.2	3.3	3.3	3.9
Slovenia	8.3	7.9	6.1	8.9	8.6	8.0	7.8	4.6	3.8	5.2	4.6	3.0	4.2	2.2
Average	11.6	10.1	7.2	9.0	6.9	9.0	5.3	4.2	3.3	3.1	3.9	2.9	3.5	2.4
BCEEs														
Estonia	9.3	8.8	3.1	3.9	5.6	6.1	4.5	9.8	4.6	-0.6	7.1	5.0	5.2	3.2
Latvia	8.1	4.3	2.1	2.6	2.5	3.9	2.8	8.4	4.8	2.8	6.8	7.7	6.6	3.8
Lithuania	8.8	5.0	0.7	0.9	1.3	3.3	1.8	7.3	5.1	-3.9	3.8	5.9	3.6	4.5
Average	8.7	6.0	2.0	2.5	3.1	4.4	3.0	8.5	4.8	0.6	5.9	6.2	5.0	3.8
SIEs**														
Cyprus	3.3	2.3	1.1	4.9	2.0	2.7	2.3	2.4	5.0	4.6	5.1	4.0	4.2	2.9
Malta	6.4	3.7	2.3	3.0	2.5	3.6	N/a	4.9	3.4	4.1	5.5	-0.8	3.4	1.4
Average	4.8	3.5	1.7	4.0	2.3	3.1	2.3	3.7	.2	4.3	5.3	-1.6	3.8	2.2

Source: constructed from data at www.europa.com

Key: (FEBEs = Former Eastern Bloc Economies; BCEs = Baltic Country Economies; SIEs = Small Island
Economies) ** = projected

Figure 17

Inflation and money growth (1979-1999) average yearly changes (low inflation counties)



Source: adapted from De Grauwe (2002:704)

The interface of the politics and economics of EU supranationality

Both the political and economic positions outlined above suggest that effective supranational co-ordination of political and economic convergence could remain elusive. What appears to be emerging within the Eurosphere is that economic supranationality can have opposite, if not equal, political effects. In the case of the ECB, this is because individual national monetary policy preferences have been relinquished and subsumed by the central decision-making processes as described above. An illustration of this point can be found by examining the relationship between the monetary policy strategy of the ECB and the SGP (sometimes referred to as the 'Pact'). Both were designed to bring about EU economic convergence, and given that 12 of the existing15 members share one currency and the same interest rate, it would be reasonable to suggest that the ECB is achieving its aims. Conversely, the SGP is emerging as an example of economic *and* political divergence. Economically, this is partly because of its developing inverse relationship with the constraints of the ECB's conservative monetary policy, and partly to do with member-states' relative fiscal autonomy.

Paradoxically, ECB monetary policy is centred on stability, but it is the very restrictions of its policy strategy formations which force some members outside the boundaries of the Pact's narrow fiscal parameters, themselves imposed in the name of stability. Portugal, France, and Germany are the main current offenders.

This is because the only room members feel they have for policy manoeuvre is to be found in any remaining, unfettered components of their autonomous fiscal policies. France and Germany, again offer a central illustration. Germany, the chief architect of the Pact, and originally a staunch disciplinarian of its imposition, is (again) on the verge of transgressing. Even more starkly, *The Economist* (August 25th 2001) argues that had the Pact been in operation for the last 15 years, both Germany and France would have been liable to pay fines to the EU on at least three occasions apiece. Moreover, Portugal has been outside the 3 percent parameter for most of the time the ECB has been in control of monetary policy. France and Germany who join Portugal in 2001 and 2002 respectively in the sub-3 percent zone have also politically collaborated to protect each other from punitive action. And, the position of the Eurosphere average whilst remaining above the 3 percent demarcation line appears to be being sucked downwards towards the 'deficit zone' since late 2000. It may argued that this is unsurprising as France and Germany account for about half of the GDP of the Eurosphere. What may be surprising, pleasantly surprising to euro sceptics, is that the average balances for the three ex-Eurosphere economies. Denmark, Sweden and the UK have been below the target since 1996, and actually in surplus since 1997. In addition, the three Scandinavian countries, traditionally considered as 'social democracies', collectively have averaged a budget *surplus* of 2.58 percent since 1998. All of this could, of course, be challenged; most of the trends have been converging to within a projected band of between +2.0 percent and -3.0 percent in 2003 and 2004. However, although there is movement towards this band, the trajectories of all the 12 euro economies do not suggest a pattern of convergence, rather merely a narrowing of divergences.

It is of major significance that these divergences can be aligned to an asymmetric interface between the politics and economics of an EU supranationality that has been, in part, created by disparate attempts to stabilise the political economy of the Eurosphere. This suggests that a more complex approach to this interface is required, and national preferences need to be considered in the light of experience since 1999.

Constructivist-neoinstitutionalism view of the Eurosphere as a political process

Here, the political focus is on the way in which the institutional organisation of the Eurosphere conditions its operation and shapes political outcomes (Bulmer 1994; Hall and Taylor 1996; Armstrong and Bulmer 1998). From a macro-political perspective the Eurosphere's institutional organisation structures access to policy, privileging some interests over others; for example, empowering technocrats in Greece and Italy to pursue domestic reforms. It also provides internal incentives for policy change that influence a specific bias to that change, notably to embrace fiscal discipline and structural economic reforms. Moreover, it constitutes the self-images and identities of the key actors, who internalise Eurosphere-wide perspectives on issues. Finally, it helps solve their collective-action problems by internalising and melding collective interests and identities.

In terms of the micro-political perspective, up until now, historical, social and cultural factors have illustrated the structured operation of the Eurosphere and influenced the motives of its leading decision-makers so that they seek to ground their behaviour in widely-shared and institutionalized principles. This communal approach to understanding the role of institutions has, however, found little favour with those, like rational-choice theorists, whose approach is more strongly rooted in realism. Realists, whether collective-minded or strongly individualist in perspective, do not see behaviour as conditioned by the moral motive of defensibility in terms of general principles enshrined in institutions. They reject the notion that actors are driven by a notion of impartiality in favour of the motivating power of individual self-interest and the search for mutual advantage (Barry, 1989; 1995). In their view, these motives play the central role in how choices are made within institutional structures and how these structures are reproduced and transformed takes on board the constitutive effects of institutional structures. However, notwithstanding any extreme realist influence on the internal politics of the Eurosphere, it is important to reflect on the Eurosphere as a collective-action problem, as well as a monitoring and compliance mechanism.

The question remains as to what extent the Eurosphere will display a capacity for self-reflection and learning about what it needs to do, and for institutional and policy reforms to ensure its viability. This capacity is more likely to thrive in a culture of multilateral action and collective interest and identity. Such a culture has a much

better than average chance of thriving in an EU context of deepening economic interdependence, growing convergence, abiding historical memories of a collective security problem, and mutual self-restraint. The Eurosphere is itself a force in helping to secure such a culture. Therefore, there are strong grounds for stressing the explanatory power of sociological neoinstitutionalism and historic neoinstitutionalism. The ECB and the member-states are in the process of advancing a culture of co-operation, not simply of a blind following of rules. What is of central importance is the nature of the social and political theory that underpins the operation of the Eurosphere, and the wider EU of which it is a part (Wendt 1999)

Constructivist-neoinstitutionalist perspective of the Eurosphere as a path-dependent process

The operational mechanics of the Eurosphere can be seen as being enmeshed in a particular path of historical development, and therefore subject to historical neoinstitutionalism. In turn, this path dependency is anchored in institutional organisation which embodies and reinforces certain social preferences and structures how actors respond to challenges (see, for example, Collins, 1980; Fioretes, 2001; Jenkins, 2004; Galbraith, 1991). Consequently, change takes on a path-dependent quality, with decision-makers and other actors locked into a particular trajectory of development that disallows some possibilities while creating a bias in favour of others. Administrations in such areas as taxation, labour-market, and welfare-state provision illustrate this tendency, and the consequent structural problems of compatibility within the Eurosphere (Boyer 2000; Ishikawa 1999). This constraining effect can be traced back to a past critical juncture when crisis threw into bold relief the failure of pre-existing ideas and institutional mechanisms to tackle urgent problems. At such moments an opportunity is opened for new ideas to enter into policy discourse and to eventually become institutionalized (Hall and Taylor 1996).

Seeing the Eurosphere in path-dependent terms draws attention to the continuity between the EMS (1979-98) and the Eurosphere (1999-2006). The Eurosphere represents an institutional restructuring of an existing policy network whose main business was managing the EMS. The EMS was born out of the perceived urgency of the problems of economic instability in Europe caused by volatility of the US dollar, which since the demise of the Bretton Woods system in 1973 had failed to provide a financial anchor for Europe, and by

high and wildly varying inflation rates in Europe. Its evolution as a mechanism to promote sound money policies[19] was further reinforced by the outcome of the ERM crisis of March 1983 which focused on the French franc (Dyson 1994). The EMS acted as a socialisation mechanism through which sound money ideas were diffused; whilst Germany via its Bundesbank provided the template that other states used (Marcussen 1998). The Eurosphere was negotiated, in most of its key essentials, within the EMS policy network. Hence there was more a gradual transfer rather than just a new beginning in 1999. The US dollar crisis of 1977-1978, the second oil crisis in 1979-1980, and the ERM crisis of 1983 were all part of the justification of the Eurosphere. They underpinned the definition of the central problems of inflation and economic instability, and therefore, underwrote the power of EU central bankers within the operation of the Eurosphere. As a consequence, there was a bias in policy development towards sound money ideas which were broadly based on monetary theory. An ECB-centric Eurosphere confirmed that bias. There was a formal commitment to policies consistent with its definition of price stability, and commensurately designed to enhance the credibility of associated decision-making.

From this generally-political perspective it might take another critical issue to move the Eurosphere on to a different trajectory of historical development. The catalyst might be a major financial crisis in the US or in an emerging economy such as China, and a subsequent deflationary spiral. In this context co-ordinated, demand-management policies would gain a new urgency and credibility. The price of such a new trajectory of development would be a movement of power away from both the central bankers and some monetary economists, and towards an institutional restructuring of the Eurosphere for this purpose. It would take state-led action, based on redefined national preferences, to make that reconstruction possible and its outcome would be a Eurosphere that was possibly no longer ECB-centric. For such a strategy of reform to succeed, Germany would, no doubt, have to be part of the leader group.

The path-dependent nature of the Eurosphere also has implications for the kinds of strategies adopted by stakeholders who may be dissatisfied with its consequences. The underpinning power of the ECB led some governments and labour-market institutions away from strategies that were ultimately and directly subject to its power. So, the negotiation of the European Employment Pact in 1999 took on both a practical and

[19] Arguably, always the underpinning driver of the ECB's Bundesbank-influenced strategic management of the Eurosphere

representative importance; the Employment and Labour Market Committee was put in place by the Amsterdam European Council in 1997 to offer an alternative institutional channel through which strategy and ideas could develop; and an effort was made to give the European Commission's Directorate-General for Employment, Industrial Relations and Social Affairs a new role in the operation of the Eurosphere.

The Eurosphere as an institution of cultural process

A central aspect of the operation of the Eurosphere is the way in which its institutional organisation provides the cultural-frames of meaning guiding action. The Eurosphere involves more than just making rules about fiscal and monetary policies and procedures for monitoring economic performance. More importantly, its institutional organisation represents culturally-constructed conceptions of these policies, which are based on shared attitudes and values. A particular set of associated symbols are broadcast through the Economic and Financial Committee, and have their point of reference set within the ECB. From participation in the ECB and in the Economic and Financial Committee actors acquire a framework of meaning in terms of which they can make sense of policy and help define their policy preferences.

The notion of the morality of sound money is undoubtedly provided by the Deutsche Bundesbank, whose pronouncements on monetary and other policies continue to carry an authority denied to others well after it lost its own monetary policy sovereignty. In essence, realistic comparison between the ECB and the Bundesbank are, at times, often quite difficult, and at others impossible because of what Radaelli (1999) describes as 'institutional isomorphism'. Other EU national monetary authorities began to follow the Bundesbank well before the Eurosphere was created. They sought to copy its real, or perceived, superior policy performance, and to demonstrate a stronger role and status for themselves. Much of this can also be traced to the Bundesbank's emphasis on a long-term orientation for monetary policy, and on making the euro an anchor for stability. Moreover, the need for central bank neutrality and independence is often stressed. Both the Bundesbank before, and the ECB after the euro, fiercely defended a 'de-politicised money' meaning that money must be kept as much as possible away from daily political influences, short-term calculations, and financial and economic fashion, as well as from political compromises (Deutsche Bundesbank, 1999b). The choice of monetary policy instruments of the ECB, notably the privilege given to monetary aggregates over

direct inflation targeting, involves more than just calculations of effectiveness. It is also demonstrates an ongoing continuity with the Bundesbank.

Actors also achieved both a new image and identity from participation in the institutional organisation of the Eurosphere; especially within the ECB. There has been heightened sense of policy-making for the Eurosphere as a whole. This altered self-image involved taking on board the implications of the structural characteristics of the Eurosphere as an entity and making policy on the basis of new aggregate data about prices, money supply, bond yields, savings and investment, trade, and so forth. There are consequences for the way in which preferences are formed. No longer is EU data nested within interpretations of national data. National data is now nested within Eurosphere aggregates, altering the way in which preferences express themselves. Actors have to adjust to defining their preferences and expressing their identity in new socially appropriate ways.

A key part of the problems of establishing employment policy to complement the Stability and Growth Pact is the lack of clear agreement about the appropriate template from which lessons can be drawn. The British government pointed to the superior job-creation record of the US in the 1990s as legitimization for following the US model. Others, led by the Jospin government in France, sought to construct a new EU policy based on the European model of society, a catalytic role for the state in the formation of ideas and organisation of co-operation, and controlled globalization. For Jospin (1999) the priorities were a European social dialogue, a European charter of civic, economic and social rights, collective bargaining on the European level, and fleshing out the services of general economic interest recognized in the Treaty of Amsterdam as an area for job creation.

But it was unclear who could provide an appropriate model that demonstrated how the European model of society could work. Sweden's active labour-market policy seemed a possibility, not least as the European Commission Director-General of Social Affairs, Allan Larson, was Swedish. Its job-creation record was not, however a convincing basis for its claim to act as the template for EU employment policy. The neocorporatist practices of the Polder model, developed in the Netherlands under the government of Wim Kok, offered a more convincing template However, there were formidable institutional,

historical and cultural problems in transferring that model elsewhere, notably to France and the UK.

The Eurosphere as an evolving social process

How the Eurosphere operates, and the kinds of policies that it pursues, are also conditioned by the logic of social appropriateness (March and Olsen 1989; Hall and Taylor 1996). There is an inbuilt sense of what affords legitimacy that affects discourse and the kinds of proposals that are likely to be adopted. The institutional organisation of the Eurosphere is not simply to be understood in terms of a functional response to the challenge presented by global financial markets and the scale of capital mobility. It embodies a discourse about economic and monetary policies amongst a professional group schooled in monetary policy that has come to possess a cultural authority, and to shape the form that globalization has taken. This discourse is about policy credibility and reputation, about modernization of labour markets and the welfare state, and about economic restructuring. Its central reference point is provided by the grafting of the concept of globalization on to a neoliberal conception of the euro. Defending policies consistent with this agenda becomes associated with validation for the actors concerned and achieving perceived legitimacy.

The operation of the Eurosphere became characterised by a particular type of cultural authority that accepted the concepts of globalisation, modernization, restructuring, credibility, and reputation. This development was bound up in a wider process. Externally, the ECB-centric nature of the Eurosphere was offered intellectual, social and political support by the IMF, G7, the OECD, the Bank for International Settlements, the US government, and transnational corporations. They shared the same discourse about appropriate institutional practices, favouring fiscal discipline and radical neoliberal reforms to labour markets and welfare states as the basis for a relaxed monetary policy. The ECB-centric operation of the Eurosphere can be seen as validated by as the hegemonic bloc in the international political economy, in the face of which the state has been under unrelenting pressure to redefine its role. That role was in facilitating the adjustment of domestic interests to the new global economic order rather than in defending those interests from external disturbances and in regulating world capitalism in the manner sought by Jospin (Cox 1987; Held 1995). From this perspective, the Eurosphere represented an institutionalized form of permanent

economic policy revolution that was led by policy professionals, especially Americans, British, and central bankers Dyson, (2000). They defined the terms of discourse and judgements about social appropriateness and were concerned to reform domestic policy agendas on a neoliberal basis.

The performance of the ECB

Finally in this section, the performativity of the ECB's management of the Eurosphere is evaluated by empirical comparisons with selected national economies. Japan and the US are used as the world's two largest economies against which the EU effectively will compete with on a number of fronts. Denmark, Sweden, and the UK comprise the three national capitalisms identified as non-Eurosphere EU members in the previous chapter, and against which the Eurosphere's performance may be measured from an internal EU perspective.

The longitudinal time series analyses and the statistical testing of selected datasets in Chapter 4, appear to suggest that the advent of the euro under the control of the ECB has made some noticeable differences to some of the typologies of national capitalisms, and against some of the criteria chosen. Conversely, it must be also be acknowledged that certain levels of convergences would be expected, especially when pre-euro convergence criteria and the SGP constraints are taken into account; and that reservations about whether we can proclaim convergences on all the criteria, when it is arguable that it is alternatively only a narrowing of divergences that may be the case, must remain. Moreover, because these analyses are effectively intra-EU measurements, and as such designed to consider the effect of the euro and ECB's supranational management of the Eurosphere on EU national capitalisms alone, in order to meaningfully assess the ECB's wider performance external comparisons are also needed. Here, four criteria are employed with the purpose of establishing not only the extent to which the ECB can be seen as a success set against its own objectives, but also whether there can be seen an increase in the overall well-offness of Eurosphere members' citizens, and therefore any meaningful attempt to address the central problem of asymmetric distributions of real wealth.

The ECB, and therefore the Eurosphere, has been organised around a single policy focus; that of monetary stability. All other economic objectives are of secondary, ancilliary, or limited importance. This policy stance is justified by the neoclassical understanding of how a national economy functions. The ECB publication of 2004, *The monetary policy of the ECB,* outlines the benefits of price stability.

Maintaining price stability makes it easier for people to recognise changes in relative prices because these changes are not clouded by movements in overall price levels. This allows firms and consumers to make better informed decisions about consumption and investment. Moreover, it assists markets to allocate resources more efficiently, because they can guide resources to where they can be used most productively, and therefore raising the potential for increased productivity and growth. For investors, they can be assured that prices will remain stable in future and will not expect an inflation risk premium in order to compensate them for risks associated with holding assets over the longer term. Therefore the risk premia that are in the real interest rate are reduced and monetary policy can contribute to the allocative efficiency of capital markets, and thereby increase the incentives to invest. And, in turn, this fosters economic welfare. Price stability also makes it less likely that firms and consumers will move resources from productive use in order to hedge against inflation. Where there is rising inflation there is the incentive to stock real goods as they are seen to retain better value than money or financial assets (virtual money). This hinders economic growth. Taxation and associated welfare systems can also foster unhelpful incentives that distort economic behaviour in inflationary (or deflationary) periods. Price stability is believed to eliminate these distortions. And, maintaining price stability prevents the considerable and arbitrary redistribution of income and wealth. An economic environment that offers stable prices therefore helps to maintain social cohesion and stability. Recent 20thcentury history has shown many times where high rates of inflation or deflation tend to create social and political unrest (2004:42).

With this single policy focus and the accompanying pronounced set of economic benefits posited as its justification, there are ready-made criteria against which to measure ECB's performance. For this purpose, four macroeconomic variables are selected; three of which, inflation, unemployment, and industrial production, were used in the empirical analysis of the previous chapter, with the addition of long-term interest rates, as related by ten-year government bonds. Inflation offers the direct and immediate opportunity to assess ECB's performance in keeping to its published (and often criticised) price stability, low positive inflation target of below 2 percent[20]. Unemployment and industrial production rates afford both an opportunity to assess the medium-term progress towards increased wealth and welfare, and to adjudge this against the above-stated benefit of 'assisting markets to allocate

[20] In May 2003, The Governing Council of the ECB defined price stability, as measured by the Harmonised Index of Consumer Prices (HICP), to maintain inflation rates below but close to 2% over the medium-term.

resources more efficiently…therefore raising the potential for increased productivity and growth' (ECB, 2004:42). Long-term interest rates are included here to evaluate whether ECB's assertion that 'enables firms and consumers to make better informed decisions on consumption and investment' (Scheller, 2004:46). Taken together, these measurements may also be used in order to present a wider assessment of the overarching benefit offered by ECB in defence of maintaining price stability above all other economic objectives. Now, bringing together the economic and political rationalisation for the single focus on price stability, the ECB's monetary policy publication states…

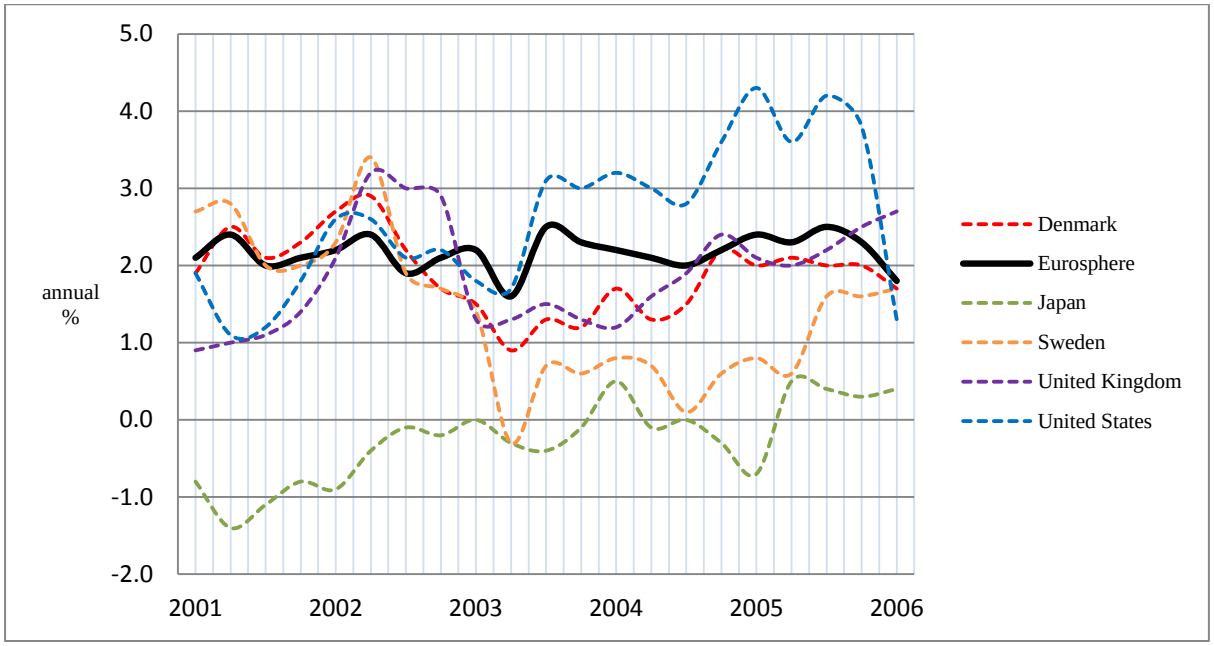
> Maintaining price stability prevents the considerable and arbitrary redistribution of wealth and income that arises in both inflationary and deflationary environments. An environment of stable prices therefore helps to maintain social cohesion and stability. Several cases in the twentieth century have shown that high rates of inflation or deflation tend to create social and political instability (2004:42)

The above indicators are examined here quarterly over the period 2001 to 2006, and set against similar metrics for Denmark, Japan, Sweden, the UK, and the US, and illustrated graphically in Figures 18, 19, 20, and 21below.

Starting with inflation in Figure 18, the first thing to note here is that the Eurosphere has largely failed in its prime objective of maintaining prices positively below the published 2 percent threshold. Of the 24 quarters measured 18 (75 percent) were above, with two more on the threshold. The overall mean for the six year period is 2.2 percent, which is higher than all the other economies excepting that of the US (2.7 percent). Moreover, all those countries below the threshold have themselves maintained price stability at the prescribed ECB level, although with variously differing policy priorities and objectives. Nonetheless, it should also be acknowledged that if the ECB's stability threshold had been more realistic, perhaps in line with De Grauwe (2002) above and associated observations, even to say 3 percent, would have demonstrated the desired price stability. Furthermore, it is also clearly visible that the positivity aspect of the equation has comfortably held; with the lowest quarterly reading at 1.6 percent. And, of the five comparator countries Japan, Sweden, and the US, all show much more volatility, even though Japan and Sweden maintain a lower average over the period. This leaves Denmark and the UK, two EU ex-Eurosphere economies, closer to the stability prescribed by the ECB

Figure 18

Consumer prices in selected countries compared to Eurosphere 2001-2006



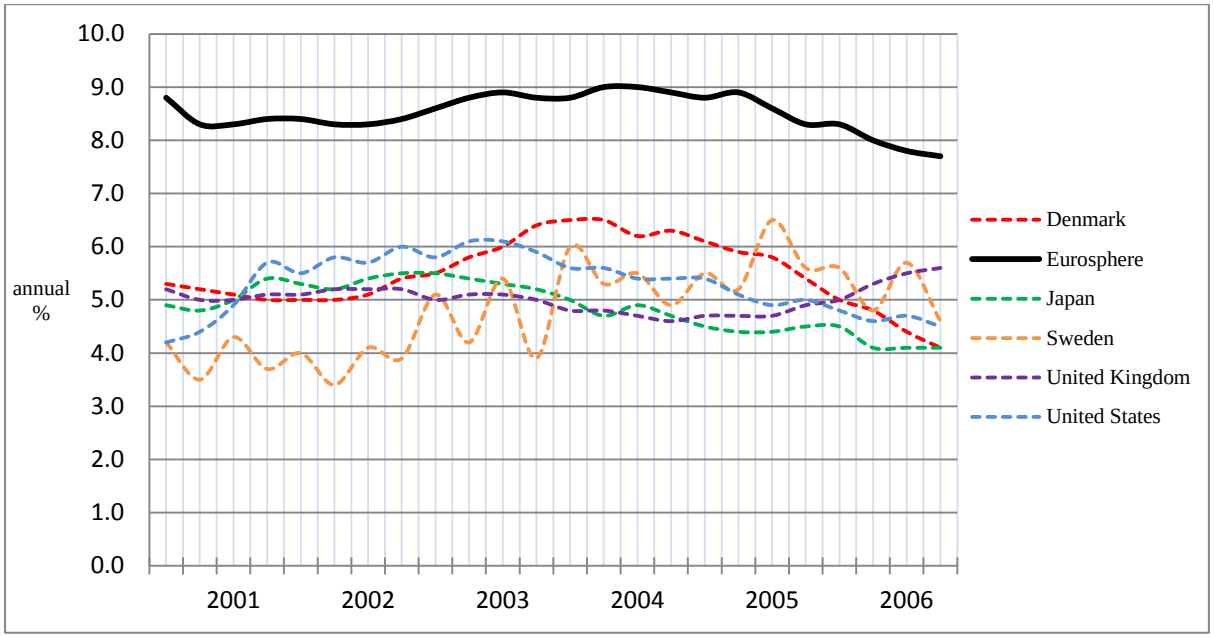
Source: primary (Raw data collected from weekly editions of *The Economist* 2000-2006)

In terms of unemployment (See Figure 19 below), there appears to be a stark contrast between the Eurosphere's performance and the other five economies (See Appendix 2). Ranging between 7.7 percent and 9.0 percent, the mean figure is 8.5 percent compared to 5.2 percent for the comparison countries – a relative difference of 63 percent. A first impression here would be one of major concern; but there is much more to consider. Firstly, it should be remembered that this measurement is an average of 12 economies with significantly differing economic profiles and structures, and although the ECB has been set up to improve job prospects and overall well-being, synthesising so many national capitalisms in this regard is far more complex and complicated than price stability – even though the ECB believes they are closely related. So what is the underlying picture? Firstly, looking at the contributing factors to the overall average, there is a considerable range of measurements. With Austria and the Netherlands averaging 4.5 percent and 4.7 percent respectively, and Belgium and Spain at 12.4 percent and 10.4 percent respectively, this 'spread' may be considered as a mitigating factor in the analysis. That is until the three largest Eurosphere economies are also

considered. Germany, ten.5 percent, France, 9.4 percent, and Italy at 8.3 percent averages for the period, all towards the higher end of the range seems to confirm that unemployment remains a major problem for, and asks questions of, both the ECB's overall management and the single focus on price stability. These issues are brought sharply into focus when it is considered that the five comparator economies, also widely and variously differing in profile and structure, appear to have controlled unemployment to within a narrow band of between 4.8 percent (Japan) and 5.7 percent (US), again without necessarily privileging price stability over all other economic objectives.

Figure 19

Unemployment – Eurosphere compared to selected economies 2001-2006



Source: primary (Raw data collected from weekly editions of *The Economist* 2000-2006)

If there is anything positive regarding the overall analysis here, it is that from the second quarter of 2006, the Eurosphere unemployment rate drops below 8 percent for the first time, and perhaps portends a new downward trajectory. However, after seven years of ECB control, it is difficult to see the overall Eurosphere employment situation improving for some time; and that again, the single focus on price stability appears to be problematic.

The ECB strongly emphasises a direct relationship between its policy focus on price stability and productivity as below.

> Price stability makes it easier for people to recognise changes in relative prices since such changes are not obscured by fluctuations in the overall price level. This enables firms and consumers to make better-informed decisions on consumption and investment. This in turn allows the market to allocate resources more efficiently. By helping the market to guide resources to where they can be used most productively, price stability raises the productive potential of the economy (ECB, 2004:42)

However, economists may differ as to the direct influence on production as a result of price stability. Firstly, there must always be a time lag between when a level of price stability is achieved and any returning confidence for consumers to begin demanding more goods and services. When that happens there will need to be an adjustment period where firms make decisions not only about how much to produce, but also to decide between increased volumes of previous production lines, reduced volumes of new products, or retrenchment to cautious levels pending an extended stable period. Secondly, required levels of production often depend on relationships outside the Eurosphere, even though there are increasing amounts of intra-EU trade. As the above quote says price stability only can raise the productive *potential* of the economy, and not necessarily its actual production.

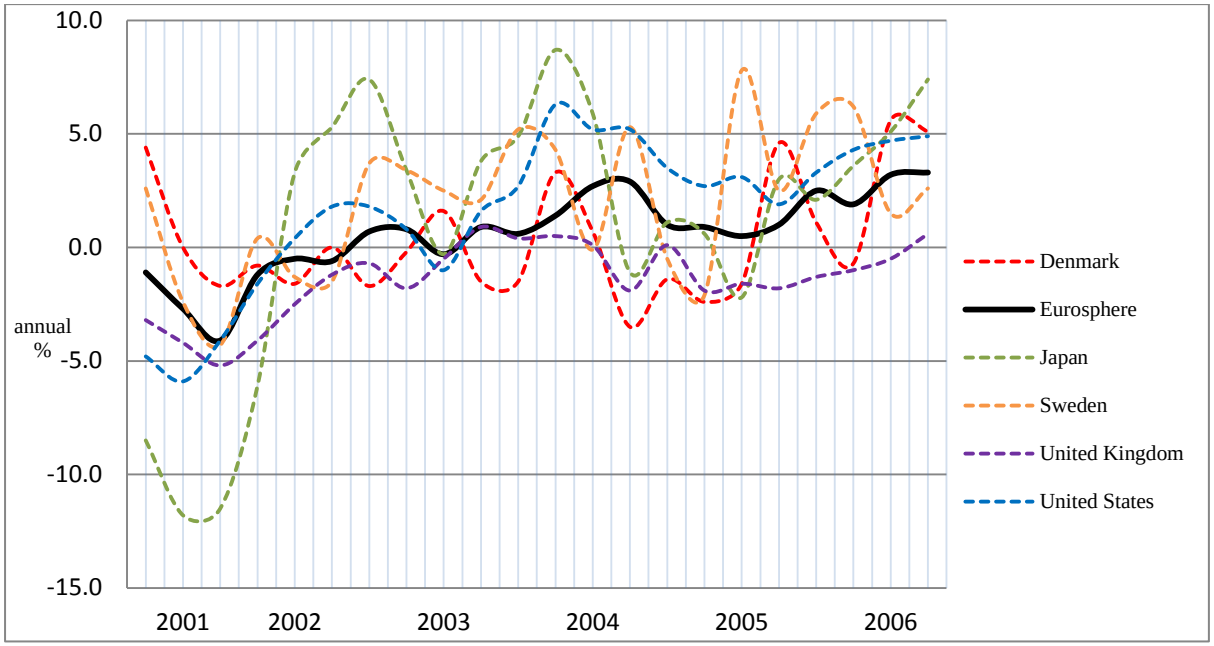
Additionally, the ECB introduces the logic of hedging in relation to production.

> The credible maintenance of price stability also makes it less likely that individuals and firms will divert resources from productive uses to hedge against inflation. For example, in a high inflation environment there is an incentive to stockpile real goods since they retain their value better than money or other financial assets in such circumstances. However, stockpiling goods is not an efficient investment decision, and therefore hinders economic growth (Scheller, 2004:46)

Figure 20 below shows the industrial production trends for the Eurosphere and five comparator countries. By comparison to consumer prices and unemployment, the pattern here is somewhat different; characterised by two temporal stages, and a narrowing and gently rising spread of outcomes, although most striking is that all the economies have spent considerable time in negative production output situations.

Figure 20

Industrial production – Eurosphere compared to selected economies 2001-2006



Source: primary (Raw data collected from weekly editions of *The Economist* 2000-2006)

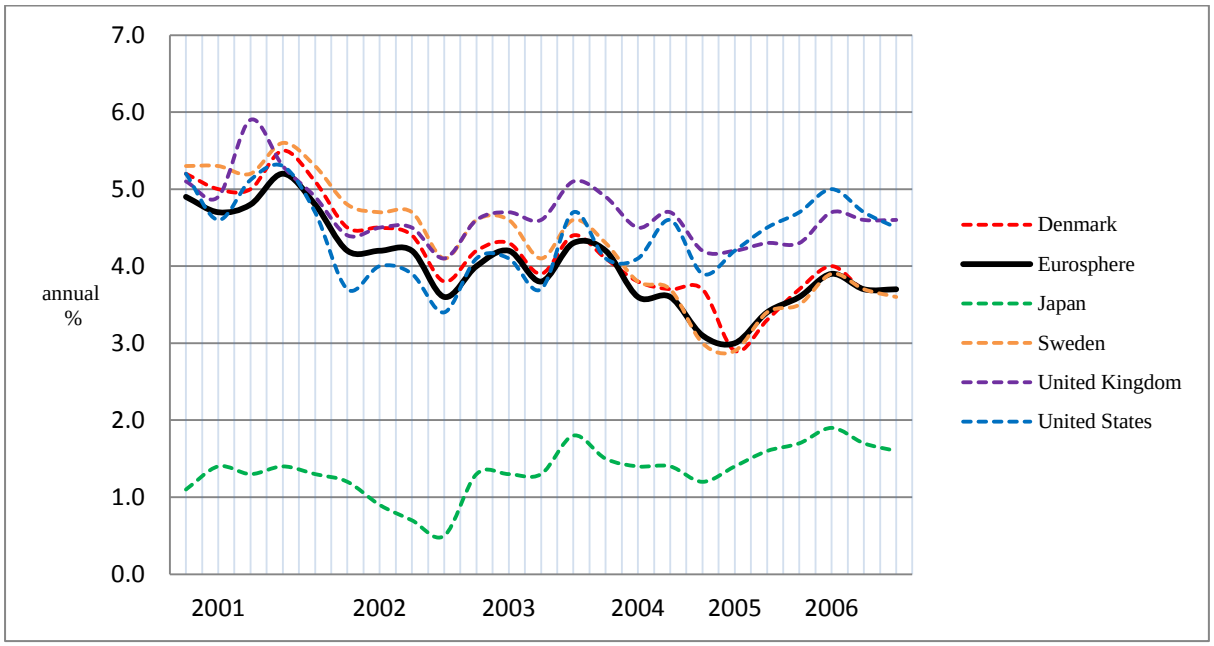
The first temporal stage from 2001 until around the middle of 2004 depicts a more volatile phase for all the economies, especially Japan. From 2004 there is a narrowing of the spread of production levels, but with just the Eurosphere and the US maintaining positive outcomes. This, for the Eurosphere shows some promise, especially as major economies France and Germany with six-year averages of (0.4 percent) (0.5 percent) respectively, are not the main contributors to the overall performance. The overall average for all six economies is 0.7 percent, and the range is -1.4 percent to 2.2 percent with the Eurosphere at 0.7 percent, and so mirroring the average for all the countries. And, there is the further encouraging trend of the Eurosphere maintaining positive output for most of the period of analysis. However, it should also be noted that the Eurosphere average output representing a middle trendline for the group may indicate a level of production dependence on the other countries, perhaps especially the US.

Long-term interest rates represented here by ten-year government bond returns illustrates overall confidence in individual economies, where lowering returns reflect increasing

confidence from outside investors. Figure 21 shows the longitudinal pattern for the six economies.

Figure 21

10-year government bond returns – Eurosphere compared to selected economies 2001-2006



Source: primary (Raw data collected from weekly editions of *The Economist* 2000-2006)

With Japan an obviously outlier, confidence levels for the remaining economies follow very similar downward trajectories from 2001 until 2005, when three upward and levelling trends emerge: the UK and US together within the 4 percent to 5 percent band; and similarly the Eurosphere with Denmark and Sweden shadowing each other in the 3 percent to 4 percent zone; and Japan vacillating around 1 percent. From an ECB and Eurosphere outlook this is both positive and encouraging, and points to a level of stability in this area, at least in terms of external confidence in potential investment. And, in sharp contrast to the unemployment analysis, the Eurosphere is outperforming the US. The extent to which this level of confidence, that also suggests international support for the euro, can be maintained, will be of central importance to the overall level of success the ECB can accredited with in future.

Has the ECB been a success?

The answer to this question of course depends on two things: what is meant by success, and how it can be measured? The preceding discussions can be seen to relate to four aspects of the ECB's history to date: its planning and evolution; the political and economic challenges it faces; the unfolding evolutionary processes that have emerged; and its economic performance relative to price stability.

In terms of planning and evolution, that a level of EMU was achieved in order that the ECB could be established must be seen as a constructivist-institutionalism success, if for no other reason that it was established in the first place. Over 30 years of planning characterised by the realisation of ideas through discourse, policy deliberation and delivery, and significant temporal setbacks, bear witness to this. The bringing together of 12 largely disparate national capitalisms to form the Eurosphere is an extraordinary achievement, and one which makes the ECB unique. Only the Federal Reserve in the US could be considered as anywhere near comparable in size or importance. Moreover, the smooth transition of national currencies, exchange rates, and interests rates was accomplished without major difficulty. Even allowing that complete EU economic integration remains elusive, and any further political integration appears more a forlorn hope than a realistic target, the ECB has firmly established itself as the head of the Eurosphere, and the euro has become one of the world's leading currencies.

It is also fair to say that a seven-year timeframe is a relatively short period of time from which to make any lasting assessment of the ECB overall. Nevertheless, it seems highly likely that it will prevail, at least in the foreseeable future. And, even though it is not hard to imagine a situation where one or more member-states may leave the Eurosphere, or the EU for that matter, it is very difficult to envisage the complete breakdown of the Eurosphere, and even if this could be foreseen, how could it feasibly be managed; and, what would be the aftermath.

In the medium-term there is also the prospect of the newly-enlarged EU to encompass a significantly expanded Eurosphere, with all ten new acceding countries on signing up only on condition of adapting the single currency. While the scale and scope of this expansion brings its own problems for the ECB as discussed above, the very willingness to join and take advantage of the perceived benefits of membership of the Eurosphere for those countries also can be viewed as a major achievement.

However, all the positive aspects of the ECB's creation and establishment, there are clear problems with both its management and performance of the Eurosphere. The first of these concerns the rationale for, and rigidity of, price stability as a single policy focus, and as such against which the ECB should be primarily assessed. The ECB's narrow target of maintaining a price level positively below or near to 2 percent has clearly failed, with the Eurosphere being outside of these parameters for 75 percent of the six years under review. This is the result of following the strict monetary stance which was the legacy of the Bundesbank upon which the ECB has been modelled (See pages 183-186).

The Eurosphere's record on unemployment is also a major concern, and will no doubt generate political spillover and social unrest in a number of member countries unless more jobs are created in the future. Indeed, the mass publics of the EU have been sold on the idea of economic and monetary union as being essential to growth and prosperity, which are not yet being realised overall. And although growth and productivity trends… from an internal EU perspective are…ECB's overall comparative performance must be questioned, and as it has been often emphasised in the discussions so far, the major problem for the ECB and the Eurosphere is that the neoclassical understanding of the function of national capitalisms is privileged, and worryingly so given that this monocular view of capitalism will almost certainly lead to major crises in the future, as has been episodically witnessed in the past.

In Chapter 2, the ideas and proposals for understanding national capitalisms in a different way were introduced. And, in the earlier passages of this chapter, economic questions have been raised about ECB policy setting, and political issues have highlighted regarding enlargement. In the next chapter, these arguments are further advanced, together with suggestions as to how the ECB needs to reconsider its understanding of how national economies actually work, and in the light of this to undergo the necessary reforms for the Eurosphere to succeed in the medium-term.

Chapter 6 A monetary production model for the Eurosphere

Overview

Following on from Chapter 2 where a constructivist-neoinstitutionalism approach was introduced as analytical framework for considering the concept of the ECB and Eurosphere as a potential supracapitalism, the following passages in this section focus on the further development of heterodox considerations of EU national capitalisms as a foundation for such a trajectory. In Chapter 3 three variants of neoinstitutionalism were advanced, together with the Wendt's 'Eclectic', thin constructivism together with Ben Rosamond's' European Economy as a Space' constructivism in order to capture political science and international relations perspectives. Here, the purpose is to further develop the challenge to the neoclassical view of the function of EU national capitalisms and argue that ECB and the Eurosphere can only deliver an EU supracapitalism if the heterodox view of understanding and managing national capitalisms is adopted via the monetary production model. In doing so, a third constructivist position, that of Hacking's 'Social Constructivism' under the guise of social interaction, is introduced to embed the idea that it is non-rational behaviour between economic actors that shape national capitalisms, as opposed to the neoclassical view that all actors within an economy are rational choice utility optimisers. And, the role of money as being a central endogenous feature of national economies is further advanced through an examination of alternative theories as to its form and function in order to offer a monetary circuit version of how the ECB may facilitate the development of an EU supracapitalism.

The money production model challenge

Neoclassical theory assumes that all economic activity is bounded within a market theoretic context of behaviour. In this way it bounds neoclassical theory into the 'allocation-misallocation duality' (Gerrard, 1989:38). In this view, all observed economic outcomes are seen to fall into one of two mutually-exclusive categories: perfect allocative equilibrium or imperfect allocative equilibrium; with imperfect allocative equilibrium being a misallocation of resources owing to the existence of either informational or structural imperfections, or both. The suggestion here seems to be that it is only the market-theoretic view that represents 'real' economic behaviour, with monetary flows only playing a subordinate role in function determining real variables when the exchange economy falls into disequilibrium. The monetary sector is treated as a discrete entity within which the demand for money equals the

supply of money, and is therefore a purely automatic and self-balancing allocative mechanism. The view that money is non-essential is one of the most important limitations to the neoclassical understanding of national capitalisms. In a monetary production economy however, economic behaviour is taken to manifest itself *within* a monetary context.

My argument here follows one particular path towards a more general heterodox, understanding of economic phenomena. The point of departure is the notion that the monetary dynamics of a national capitalism significantly affect the nature of behaviour patterns of firms and households. In this way a national capitalism is characterised by the production of commodities in a 'monetised' economy. The conjunction of these characteristics creates a monetary production economy in which the behaviour patterns of firms and households differ in significant ways from those to be found in a market exchange economy. And, it is this fundamental assumption which allows us to consider the equally important role of non-allocative modes of activity.

Neoclassical theory presupposes that all economic activity takes place within the market-theoretic context of behaviour. The market-theoretic assumption locks neoclassical theory into the duality of allocation-misallocation. All observed outcomes fall into one of two mutually-exclusive categories of perfect allocative equilibrium and imperfect allocative equilibrium; the latter being cases of misallocation caused by the existence of structural and/or informational imperfections. All observed outcomes are either perfect allocative equilibrium or cases of misallocation, and neoclassical theory allows for no other type of outcome. This places severe limitations on the potential range of reactions and remedies which can be provided by economists and politicians working within that frame of reference.

The market-theoretic assumption carries with it the implication that classical theory is the economics of 'real' behaviour. Neoclassical theory is a theory of a national economy in which behaviour is 'real-focused' (Gerard, 1989) in the sense that agents are only concerned with the exchange of commodities. In a market exchange economy, monetary flows are purely the result of the underlying stock-adjustment processes that follow such exchanges of commodities; and in this way, neoclassical theory adopts a reductionist approach in relation to monetary flows. Monetary flows merely represent price multiplied by quantity. They play no active role in determining the position of equilibrium in real terms. Monetary flows are seen to play a significant role only in determining real variables during the process of money-price adjustments when the exchange economy is in disequilibrium. Apart from this, money

is not considered to be an essential element in a market exchange economy. It is merely a commodity demanded for transactions and asset valuation purposes, as in my notion of virtual wealth compared to real wealth. The monetary sector is treated as a separable entity, perhaps running parallel to the real economy, in which an allocative process ensures that any given demand for money equals the same automatic supply of money, in a sort of coterminous relationship.

Therefore, the neoclassical acceptance that money is non-essential is one of the most fundamental limitations which the neoclassical frame of reference imposes on the theoretical conception of economic behaviour, and the restrictive nature of the market-theoretic assumption has to be recognised. But in recognising the existence of this crucial constraint inherent in orthodox economic thought, it follows that neoclassical theory, as a whole, must be rejected as an adequate theoretical foundation for the study of all aspects of economic behaviour in general, and the national capitalisms of the EU in particular. Within a monetary production economy, all economic behaviour takes place within a monetary context, this emplaces the ECB at the centre of the proposed EU supracapitalism; and also means the implications of the monetary context of behaviour must therefore be investigated. The core proposition here is that the monetary context of behaviour leads to non-allocative modes of activity *as well as* allocative modes of behaviour, but which are qualitatively different from them.

The proposed move from the neoclassical theory of a market exchange economy to the non-neoclassical theory of a monetary production economy demands the rejection of the choice-theoretic assumption. Neoclassical theory treats all economic behaviour as the result of optimising choices by rational agents operating within the context of a market exchange economy. Rationality is the fundamental law of order within the world of neoclassical theory; and is the single all-embracing principle of economic behaviour. From the perspective of neoclassical theory, non-rational behaviour is, by definition, non-economic behaviour. This is a strange position to hold when you consider that large swathes of consumer and business buying decisions are made emotionally and irrationally by human beings, and that modern marketing and advertising techniques and campaigns are predicated of such irrationality; the now prevalent ‘impulse buy’ being one example.

An alternative perspective to the choice-theoretic assumption is provided by the socially-interactive approach. In the socially-interactive approach, firms and households are not

treated as rational agents able to use their available information so as to optimise consumption with respect to well-defined and pre-determined goals. Rather, firms and households are viewed as adopting decision rules which are considered to be appropriate in the circumstances, but variable in the sense that such rules may be revised in the light of past experiences or the acquisition of new information. The behaviours of the agents change in the light of the circumstances and economic conditions in which they find themselves, and in this way context will play a crucial role in determining the decision-making mechanisms used by firms and households. The socially-interactive approach therefore allows for the possibility that the monetary context can have a significant effect on the behaviour. Therefore, the adoption of the socially-interactive approach is a necessary element, albeit an implicit one, in the development of the theory of a monetary production economy.

The adoption of this alternative approach suggests a method of analysis, or analyses, in which all theoretical models must be constructed using socially-interactive assumptions which should be an acceptable and realistic approximation to the observed behaviour patterns under investigation. Given realistic assumptions about observed behaviour patterns, the theoretical economist may pose two different types of question. The first type of question is to ask why particular agents adopt particular behaviour patterns under specific circumstances. This backward-looking question takes the observer into the realms of psychology and organisation theory; subject fields with much to say on the decision-making processes of individuals and organisations. There should be no reductionist assumption that all observed behaviour can be ultimately explained in terms of one, all-embracing principle. The second theoretical question pursued within the socially-interactive approach is the forward-looking question as to the implications of the observed behaviour patterns. This involves observing the aggregate outcome implied by the behaviour patterns of individual agents. The results of this type of theoretical analysis provide the means with which to consider macroeconomic reactions and policy remedies sought by politicians and economists. However, in adopting the socially-interactive approach, it must always be remembered that theoretical models and their implied prescriptions are applied only if the underlying assumptions remain realistic. As Gerard (1989) observes ‘all too often the axiomatic status accorded to the assumption of rationality has blinded economists to the empirical limitations of their models’. The socially-interactive approach offers an alternative method of analysis to the choice-theoretic approach of neoclassical theory.

Therefore the socially-interactive approach rejects the instrumentalist method used to justify the continued acceptance by neoclassical theory of the existence of overriding rationality, which is clearly an unrealistic assumption. The instrumentalist method adopts the position that the realism of assumptions is not a relevant criterion on which to base the selection of theories. According to the instrumentalist method theoretical models should be judged primarily on the grounds of their predictive power. This methodological stance is misleading, because in denying the relevance of realistic assumptions, instrumentalism rejects the pursuit of explanation as an objective. Explanation must, by definition, involve attempting to justify observed relationships in terms of realistic assumptions. Instrumentalism replaces the pursuit of explanation with the pursuit of correlation. This results in statistical associations which are unexplained except in terms of the assumptions from which they have been generated. Indeed, correlations are of little use in political economy without some evidence of causality. Moreover, if these assumptions are not based on observed reality, the explanations are meaningless as are any implied reactions and remedies. The instrumentalist method has the effect of protecting the underlying assumptions of any theoretical system from direct scrutiny, and thereby can be seen as self-fulfilling and therefore largely uncritical in effect.

The instrumentalist justification for the use of rationality in the way the neoclassical theorists employ it, has not only blinded the followers of neoclassical theory to the irrelevance of their models for the analysis of non-allocative behaviour, but theoretical limitations of the choice-theoretic approach within the neoclassical frame of reference have also been ignored. The use of rationality in this way also means that determinate theoretical models can be constructed. Rational agents with perfect information make the optimal choice in any particular choice situation. However, once the more general and realistic assumption is made that agents may have information inputs which both vary over time and within contexts, it is no longer possible to build the determinate models upon which neoclassical theory is founded. There is an infinite variety of assumptions which can be made on the nature of informational imperfections and the learning procedures which agents adopt in such circumstances; and so the choice-theoretic assumption breaks down completely.

Imperfect information also raises severe difficulties for the equilibrium-theoretic assumption of neoclassical theory. Under conditions of imperfect information, agents are likely to adopt various learning mechanisms. This creates a disequilibrium adjustment process, but the nature of the adjustment process will depend on the particular informational imperfections

present and the particular learning procedures adopted. It follows, therefore, that there is no reason at all why any adjustment process should move towards the equilibrium outcome associated with conditions of perfect information. The neoclassical Keynesian theories of perceived equilibrium are one example of an adjustment process, under conditions of imperfect information, which does not only does not result in a perfect allocative equilibrium, but that also may have to be accepted or tolerated The inevitable conclusion to be drawn is that imperfect information represents another theoretical problem for neoclassical theory.

The problem of imperfect information demands the adoption of the socially-interactive approach. Theoretical analysis must start from realistic assumptions about information sets and learning mechanisms. This may involve empirical observation and the use of the findings of related subject fields such as consumer behaviour, sociology, or psychology. Unsurprisingly, such heterodox implications for analytical methods have been resisted by the majority of the economics profession, and especially so in the analysis of the behaviour of national capitalisms. The proponents of neoclassical theory have usually attempted to accommodate the implications of imperfect information within the classic set of assumed notions of order. Examples of this accommodation are the whole series of hypotheses which imply that agents adapt their expectations in a fixed, mechanistic manner, and are therefore predictable, regardless of time or context variabilities. These adaptive hypotheses are too simple and rigid to provide a realistic approximation to the complex learning procedures used by individuals and organisations. However these adaptive hypotheses do accept that agents must adapt their behaviour in some way through experience. More recently, however, the limitations of the adaptive hypotheses have led the followers of neoclassical theory to adopt the rational-expectations hypothesis, in which agents are assumed to have complete information on the relevant core elements of economic phenomena. In other words, the rational-expectations hypothesis assumes that agents know all that can be conceivably known, and of course raises the tangential but nevertheless important question of what is and is not knowable.[21] Agents with rational expectations have no need to learn. The rational-expectations hypothesis is but the most recent example of the tendency to retain the neoclassical assumption of perfect information, albeit in ever more sophisticated guises. Another 'escape' from the implications of imperfect information is to argue that agents have complete probabilistic knowledge in the sense of being able to attach a probability to all

[21] The question of what is knowable remains a major, and sometimes paradoxical, epistemological concern, as in Fitch, F. (1963) 'A Logical Analysis of Some Value Concepts', *Journal of Symbolic Logic*, 28 (2) pp.135-142

possible outcomes. This allows agents to make rational choices based on the optimisation of expected values. And, this means that agents are assumed to face situations of risk rather than uncertainty. This is the approach which sustains the search for new explanations of misallocation developed within the 'new microeconomics' faction of neoclassical theory. It is yet another attempt to deal with imperfect information within the neoclassical frame of reference and as such is destined to be inadequate when judged from outside the neoclassical assumptions. Moreover, it is another example of the bounded vision which pervades modern economic theory. Imperfect information requires the development of new notions of order and new methods of analysis - that is, a move beyond the confines of neoclassical theory.

With the foregoing in mind, the nature and characteristics of the monetary production economy version of national capitalism is examined. However, before moving on it is important to note the underlying influence of Keynes's *General Theory*. Here, Keynes can be seen as having adopted the socially-interactive approach; where he began with a series of simple, but realistic, assumptions about the observed patterns of behaviour in a monetary production economy. And, it is from these assumptions that the properties which would be exhibited by a monetary production economy were first aired.

The main thrust of the argument in this chapter however, is not neo-Keynesian, or really Keynesian-focused at all, but rather in the search for the answer to the question, can the monetary production economy, the basis of which has been offered by early Keynesians as a theoretical constructs, provide useful insights into the operation of national capitalisms; and in this research whether this can be extrapolated and developed to realistically fit the notion of a supranationally-managed collective of EU national capitalisms. Moreover, and of core importance to this thesis, is whether the monetary production model and its predication upon the central and endogenous role of money can be adapted so as to allow the location of the ECB to be at the centre of a supranational version of monetary production model, thereby forwarding the potential for an EU supracapitalism. The remaining passages in this chapter follow Gerard (1989) and adapt his explanation of how the monetary production model functions, and from that how it may fit a collective of interdependent national capitalisms monetarily and economically conjoined by their mutually-inclusive relationship with the ECB.

The functionality of the monetary production model

The significance of the monetary context is that firms and households adopt patterns of behaviour in which they seek to meet objectives with respect to monetary flows. Behaviour in a monetary production economy is flow-determined, not stock-determined. Monetary flows are not the result of a stock-adjustment process but a key determinant of the behaviour of firms and households. The monetary production economy is largely characterised by non-allocative modes of activity in which monetary flows are an integral part. The nature of money cannot be understood in terms of some separate monetary sector. The whole of a monetary production economy is a monetary sector, in our case centred upon the ECB.

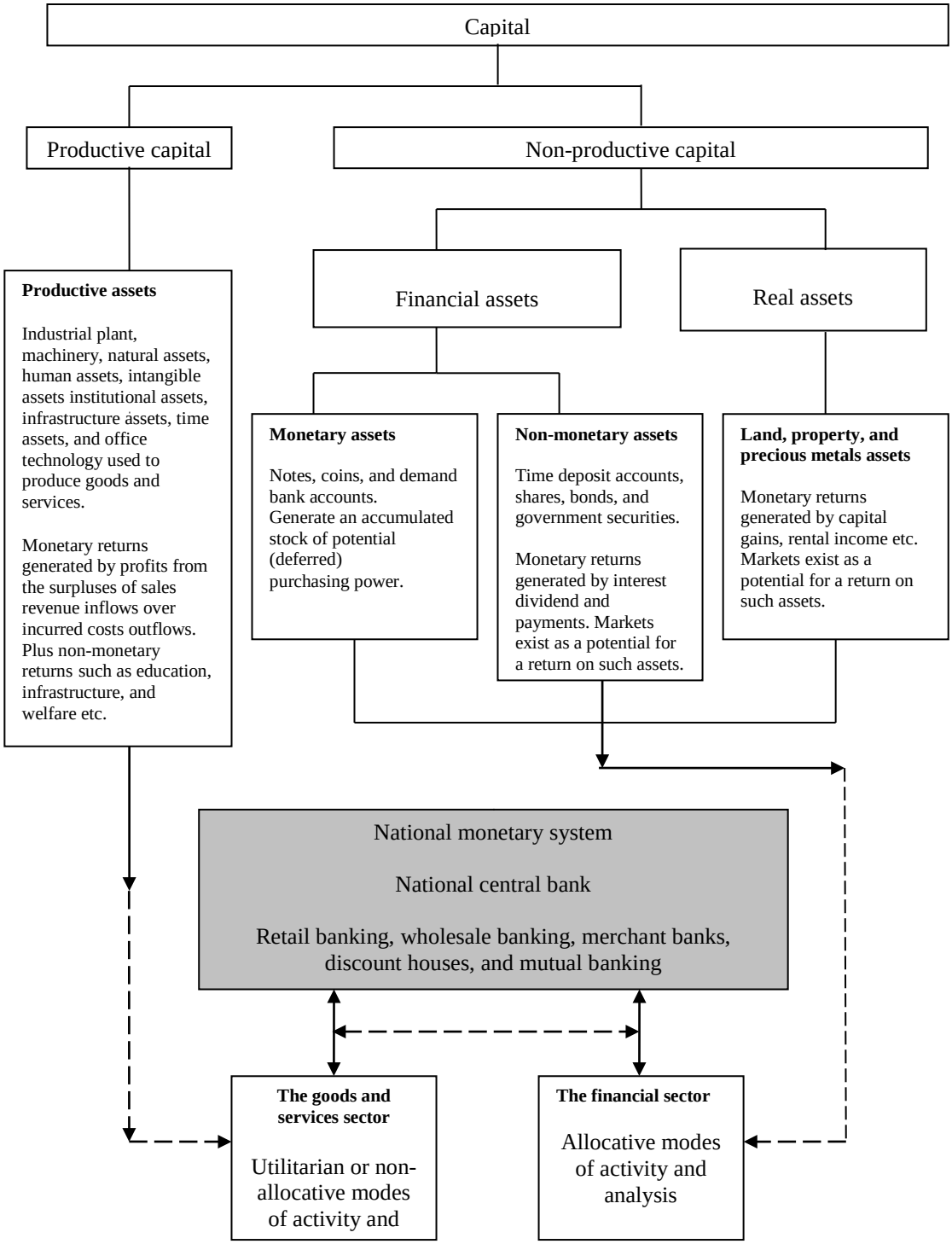
In a monetary production economy, firms undertake production in order to generate a monetary revenue inflow in excess of the incurred monetary cost outflow. The difference between the revenue inflow and cost outflow is monetary profit, the principal *raison d'être* of capitalist firms. Monetary flows are the central concern for firms, not the trading of physical goods and services. Firms trade physical inputs and outputs in order to achieve monetary objectives. Firms operate in a sequential manner, with monetary flows being of primary importance. The significance of this observation is overlooked by neoclassical theory, which attaches only a secondary importance to monetary flows, treating them as being entirely consequent on the underlying stock-adjustment process. From this perspective, money is but a veil behind which real economic processes operate entirely unaffected by its presence.

An illustrative summary of the structure of the monetary production model is presented below in Figure 22. The non-allocative, or utilitarian, properties of a national capitalism are shown alongside its allocative features, and together can be seen to flow into and from the national monetary system and through the central bank.

The behaviour of households is also affected by this monetary context. Households make their decisions on the level of their monetary outflows on consumption and savings with respect to the level of their monetary inflow of income received from the production process. It is this observation which Keynes located in his notion of the consumption function. It is entirely inappropriate to liken the sequential decision process within households to a barter stock-adjustment process in which households exchange their stocks of factors of production directly for stocks of consumer goods and services. Monetary flows are, by definition, equal to price multiplied by quantity, or amounts multiplied by monetary values. However, it does not follow from this that prices and quantities must necessarily be determined simultaneously

Figure 22

Illustration of the allocative and non-allocative features of the monetary production economy



Source: primary

in the manner suggested by the supply-and-demand theory of price determination. This occurs only in the particular circumstance in which agents are operating within the allocative mode of activity, such as in stock market trading and retail fruit and vegetable markets. In general, however, prices and quantities are determined independently by very different socially-interactive processes. It is a fundamental property of a monetary production economy that prices and quantities are determined quite separately.

Output and employment in a monetary production economy

Capitalist firms seek a number of often conflicting objectives. Core among these goals is the pursuit of monetary profits. Firms seek to earn profits by the marketing and production of goods and services. The marketing activities of a firm are those associated with generating a demand for its output. The production process, on the other hand, is concerned with supplying the output required to meet the demand generated. It follows, therefore, that firms necessarily display a sequential behaviour pattern in which marketing activities are of primary importance, with the production process having only a secondary, consequential, and therefore almost residual role. The sequential nature of the decision process within firms is central to the output decision. The output decision is the fundamental behaviour pattern of firms in a monetary production economy. Firms set their output levels with respect to their expectations of the level of demand for their output. It is this single behaviour pattern which ultimately gives a monetary production economy its fundamental property of being a demand-side economy; that is, in a monetary production economy, demand determines supply. Firms' expectations, which affect such output decisions, are often described as short-term expectations. It is a convenient and simplifying assumption that these expectations are correct, since the effect of mistaken short-term expectations is only to create temporary variations in output and stock-building as firms seek, by a process of trial and error, to discover the actual level of demand.

The demand for any product of a firm depends on three separate elements: an individual product's share of the total demand for the particular product group within which any individual product is located; the share of the particular product group in the aggregate demand for all goods and services produced in the economy, and the national level of aggregate demand And, since the central concern here is with the short and medium-term behaviour of the macroeconomy, it is the level of aggregate demand which is of primary importance. The distribution of aggregate demand between, and within, product groups may

have consequences for the aggregate level of employment if firms and or groups vary in their policies to employ and to lay-off workers. Thus, for present purposes, it can be assumed that firms set the level of output solely with respect to their, assumed correct, short-term expectations on the potential level of aggregate demand.

It follows, therefore, from the nature of the output decision of individual firms that the national capitalism level as a whole, aggregate output depends on aggregate demand. As the level of aggregate demand changes, the level of aggregate output will tend to move in the same direction. However, this socially-interactive relationship involves a link between two very different spheres of activity. Aggregate demand is reflected as a monetary flow, whereas aggregate output is a real flow of tangible and intangible goods and services. There is a gap between these two spheres of activity; a gap which firms must bridge in their output decisions. Firms hold short-term expectations on product demand in real terms which must be based on their expectations of the monetary value of aggregate demand. This is a unique, but very significant, feature of a monetary production economy. The gap between aggregate demand and the aggregate supply of output by firms means that there is no one-to-one relationship between aggregate demand and aggregate supply. Firms can respond to (expected) changes in aggregate demand in three different ways: by changing the level of output; by changing prices; or by rescheduling through time by inventories or customer queuing.

Firms may respond in any one of these ways or by some combination of them. It follows, therefore, that the output decision is a complex one, although not necessarily complicated, and there is no simply prescribed single rule-of-thumb at work. There is no fixed planning to supply with respect to changes in the level of aggregate demand, because the propensity to supply varies with circumstances and context. It seems plausible, however, that the following behaviour patterns are likely to be exhibited by firms. If firms hold short-term expectations of only a temporary rise in aggregate demand, and if firms are also currently operating under conditions of relatively full capacity, it follows that firms are more likely to respond by raising prices and building-up customer queues, rather than by increasing the level of output. On the other hand, firms are more likely to increase their level of output if they expect a more stable medium-term rise in aggregate demand under rather than raise prices, if capacity is, or can be made available

If firms expect a fall in aggregate demand, firms are more likely to react by cutting price and stock-building if the fall in demand is expected to be only temporary and if firms are operating near to their minimum-acceptable level of capacity utilisation. Firms are more likely to respond by reducing output if the change in demand is expected to be more permanent and if there is relatively full-capacity utilisation.

In summary, in a monetary production economy, the aggregate level of output is primarily determined by the level of aggregate demand. However, there is no motivation to supply with respect to changes in the level of aggregate demand. The inclination to supply will vary with circumstances and context. In turn, any propensity to supply will tend to depend principally on the direction of the change in aggregate demand; the rate of the change in aggregate demand; the expected degree of permanence of the change in aggregate demand; and the current level of capacity availability and utilisation.

Towards an alternative theory of money and the role of the ECB

Beginning with the question of the nature, characteristics, and function of money within national capitalisms, we are presented with two closely interdependent challenges: to determine how and where money is created; and, once generated, what role does money perform in a national capitalism? The first problem here is of sequence. Is money, or more precisely are money-flows, created by the demand for it or them as a direct consequence of the economic activity within a national capitalism; or is money introduced (or withdrawn from) outside the capitalist economy in order to regulate or control the level of activity within it? Put simply how, when, and where, does money come from?

One way to answer these questions in particular and also to consider the function of money within the workings of national capitalisms in general, is to examine a number of heterodox views of money and monetary theory. Additionally, these perspectives may grouped into two general schools of thought and presented not necessarily as a straightforward debate, but by exploring the similarities and differences between them, which are, in turn, highlighted by the sub-divisions within each, and also, in some cases, the overlapping nature of their positions. All of the models presented here are classified as heterodox, and contrast sharply to the contemporarily generally-accepted explanations of money, which are deeply rooted in the neoclassical economics frames of reference, and wholly based on market clearing equilibrium theory, sometimes referred to as exchange economy theory. And, as Rochon and Rossi (2003) point out, these explanations ensure that macroeconomics remain firmly ‘rooted in

microeconomic foundations. The causality runs from microeconomic to macroeconomic phenomena, while never acknowledging the possibility of reverse causality.' In stark contrast, the theories considered here, and also the above non-neoclassical explanation of how national capitalisms function, are centred on models of production, and take into account and relate to money, the elements of the real economy which include institutions, cultural development, time, history, income distribution, class relations and technological change. (Rochon and Rossi, 2003)

In so doing, these explanations attempt to discuss the real world from direct observations, and are fundamentally dynamic in nature, and therefore do not gravitate towards any presupposed equilibrium position. Opponents of these heterodox views often claim that they are based simply on anti-equilibrium, but as Kaldor (1985:12) observes, 'the economy as a continually evolving system whose path cannot be predicted any more than the evolution of an ecological system in biology'. The one issue that does bind the heterodox views of money and monetary theory is unemployment, where in contrast to the modern interpretations of neoclassical theory, the economy does not automatically move towards a level of aggregate demand which results in full employment at a prescribed point of equilibrium, but rather levels of unemployment are actually an omnipresent component of the function of national capitalisms, and therefore not brought about by imperfections, but through a lack of aggregate demand which influences the nature and timing of production and investment decisions, financial institutional lending decisions, and therefore levels of productivity and ultimately, levels employment. In this way (involuntary) unemployment is a natural consequence of the state of the economy at any given temporal juncture. With this in mind, it is useful to collectivise these heterodox explanations of national economies as 'production economies', with their neoclassical counterparts being seen as 'exchange economies'.

In production economies, money is of core importance, and as such is non-neutral; whereas in exchange economies money is seen a neutral, whereas in the production processes money is merely the lubricant that make the action run more smoothly, but where in production economies production cannot turn at all without money. This centrality of money in production economies is also very important for another reason. The main purpose of production is to sell the goods produced for profit, and such profit is expressed in monetary terms, and is therefore monetary profit. So, money is to be found at the very beginning of the production process as necessary investment for the process to begin, and also at the end of the resultant commercial transactions where revenues are translated into monetary profits after

adjusting for fixed and variable costs. Therefore with money being anything but non-neutral in this view, we are necessarily drawn to consider the cost of money; and the cost of money is its price as expressed by interest rates, as is the case with the ECB for 12 economies. Although these rates are exogenous in the sense that they are set and controlled by central banks in the short-term, and these rates then are influenced by, and therefore follow a sequence of events, over time to become long-term rates, its role is often over-simplified because operationally it has a dual function which is of vital importance to the production process. Firstly, interest is an actual cost of production, and although the prevailing rate of interest does not have a direct influence on investment, as demonstrated by downward-sloping investment demand curves, it is an important determinant on costs of production, both in terms discounted cash flow calculations, and using opportunity cost projections for investment decisions. Secondly, the rate of interest of interest may also have an indirect effect on output because of its distributional effects when interest rate rises and effective demand is stilted, thereby adversely affecting sales and production cycles, and sometimes also employment levels. In this way, production economies van be viewed as monetary and credit-based economies (Rochon and Rossi, 2003), and as is argued above in when detailing the monetary production model view of national capitalisms, the real and monetary sides of the economy are not independent, and this means that money cannot just be an exogenous factor, and therefore it is not only endogenous, but is at the core of the workings and operation of national capitalisms.

The Post-Keynesians and the Monetary Circuitists

Within the heterodox camp then, we can identify two main strands of thought: those of the post-Keynesians and those of the Monetary Circuitists. And, while is important to note from the outset that there is much to distinguish the two; there is also much that binds them together. The post-Keynesians movement brings together four originally distinct schools of thought: the American post-Keynesians; the Minskian post-Keynesians or Structuralists; the Cambridge post-Keynesians; and the Horizontalists. And, while each of these schools possesses very clear underpinning features of their own, they can be further distilled down into two main strands of their own: Structuralists and Horizontalists.

For the American post-Keynesians uncertainty and time play important roles in understanding the endogenous nature money in national capitalisms. For them, the existence of money is directly related to the all-pervasiveness spectre of uncertainty. National

capitalisms are not necessarily prone to crises, but such uncertainty obviates these economies from achieving optimum, or close to optimum, levels of employment. For the Minskian Structuralists, national capitalisms are, indeed, prone to crises, although modern institutions can be organised and legitimised in ways that can usually prevent major turbulences from being terminal. They see financial innovations such as derivatives of both the asset and liability type, playing important roles in explaining the endogeneity of money, and the attendant weakening abilities of central banks to always effectively control the money supply. For their part, the Cambridge post-Keynesians, privilege growth theory and business cycles in their explanations of money, although still with the firm conviction of the endogenous nature of money. Finally, the Horizontalist view of money focuses on the function of interest rates in monetary economies of production, or as outlined in our case above, the monetary production model of national capitalisms. The emphasis here is on banks lending money only to creditworthy firms and individuals, and thereby far from being passive actors in national economies are active players in the endogenous money-creation process. (Rochon and Rossi, 2003).Within these four schools and two groups, the main commonalities in relation to the functioning of national capitalisms, are that output is demand-determined as laid out above in the description of the monetary production model of capitalism; the role and functions of banks; the endogeneity of money; and the important influence of uncertainty. In particular, there is agreement regarding the actual creation of money resulting from demand for loans from banks. And, as Rochon and Rossi note, there are very clear opportunities for key elements from each school to be brought together to forge a coherent approach representing all schools.

The Monetary Circuitists movement also comprises different schools, and within this collective, three can be identified: the French circuit school; the Italian school; and the followers of the Dijon-Fribourg school. The French school collective is mainly concerned with policy-oriented issues relating to levels of economic activity, unemployment, and stabilisation strategies. The Italian school, largely following the work of Graziani (1987,1990,1996, and 1997), centres on the sequences of money flows in the circular process between production and consumption, where all firms and all households are considered together in terms of interventions by the banking system. While the Dijon-Fribourg approach focuses on the double-entry system of the banks and how money is instantaneously created (and destroyed) by reference to workers' wages being simultaneously paid and deposited into

central banks' reserves being used to lubricate the economy through the overall bank lending process.

The next evolutionary stage of the post-Keynesian approaches came with the contributions of Kahn, (1958) and Kaldor (1958), where the focus was on the variable velocity of money and the limitations of monetary policy in controlling inflation, rather than the recognition of the endogeneity of money. Kaldor's early concentration was on the causal relationship between money and income, whilst also noting that such causality, itself rooted in the quantity theories of money, was less than reliable. For Minsky, at the same early stages, the core issues revolved around the unreliability of monetary policy, which of course, in the absence of the recognition of money having only an exogenous function in capitalist economies, would have to be at least unreliable some of the time.

Therefore, it can be comfortably posited that, at these early stages in the development of modern theories of money, that the broad post-Keynesian church had not yet recognised the full potential for the non-neutrality of money. However, this is with one exception. The seminal work of Joan Robinson, *The Accumulation of Capital*, (Robinson, 1956), where she is very clear on the endogenous nature of money, and also the importance and centrality of the function of bank loans to finance production and also the methods by which money can be extinguished or destroyed through the reflux mechanism. The reflux mechanism, sometimes called the compensation principle, refers to the balance sheets of central banks (which largely reflect the mirror image of the commercial banks under their stewardship), where some elements of the central banks' balance sheets are automatically compensated for by other elements within the balance sheet. It has been argued that Robinson, from the Cambridge post-Keynesian school, ought to be credited as the founder, or perhaps discoverer, of 'the post-Keynes school of endogenous money'. (Rochon, 2001).Although as Rochon and Rossi point out.

> It would be naïve to deny, however, that today the endogenous money view is encumbered by a number of differences that stand in the way to build (ing) a unified, and consistent, theory of money and money economies (2003)

Differences and similarities

The differences between the Horizontalists and Structuralists with the post-Keynesians collective can be seen to centre mainly on the availability of reserves and the overall liquidity

the banking system. Moreover, the approach seeks to explain national and international macroeconomic problems such as inflation and unemployment.

However, these sub-divisions within the monetary circuit movement are not quite as straightforward as being three sub-sets of a singular whole. The Dijon-Fribourg group, largely through the influence of sharp differences of opinion between Paguez of the French school, and Schmitt of the Dijon-Fribourg school, have denounced the Circuitist label, preferring to be known as the School of Money Emissions. Effectively this means that there are really three general approaches to be considered, and it is instructive to contrast and compare each of them against each other in a 'within and between' type of commentary.

First, the post-Keynesian monetary approach, and the similarities and differences between this and the general features of the monetary circuitist approach.

The post-Keynesian monetary approach

Early theories explaining the nature and characteristics of money in capitalist economies, came under scrutiny for the first time in a series of papers Keynes published following his *General Theory*, which focused on the finance motive. Here Keynes's argued that banks were at the centre of the lending process supplying firms with the necessary finance to generate production. However, it was not at this point that the endogenous nature of money was revealed, rather, it was Keynes's pointing out that firms (presumably because of readily available bank finance) do not require *ex ante* quantities of savings in order to make investment decisions. However, what was achieved here was the early intermediate linkage between the production process and the banking system – one of the key features of the monetary production model – and the importance short-term bank lending in the form of overdrafts, and the creation of medium and long-term credit lines. And, in this, there is the first indication of the potential for money being considered as being endogenous to national capitalisms, even though at this stage Keynes completely and mysteriously ignored, or somehow overlooked, the role of the central bank. Without paying attention to the central bank, its function and purpose is left out of the analysis, and the focus stays with the commercial clearing banks as a sub-sector of the macroeconomy. Perhaps this can be explained by Keynes previously, in the *General Theory*, positing money as exogenous *because* it is controlled by the central bank. Of course, the major omission here is the later, and generally-accepted, Keynes view of function of the money multiplier as a consequence of

of banks, together with the riskiness of when banks attempt to expand their balance sheets. The Structuralists argue that banks are not as passive as, and have more control over, bank lending to firms and individuals than the Horizontalists claim. In this regard, Structuralists maintain that banks do not necessarily become more illiquid or riskier as the quantity and value loans they make increases. The Structuralists generally move on three points. First, that money can only ever be partly endogenous; that is some of the total money supply is endogenous, and some is exogenous, because of the money supply only being endogenously adjusted in conditions of economic growth. Second, they hold that money is only endogenous when bank credit is required as a result of firms' output expanding. And third, as banks do increase the volume of their loans to firms and individuals, they become more illiquid and therefore also increase the levels of interest charged in order to compensate for the riskiness associated, or perceived to be associated, with such illiquidity. Horizontalists, however, reject all three of these assumptions. First, they claim that money is wholly endogenous, and is 'always and everywhere an endogenous phenomenon' (Rochon and Rossi, 2003). This is because even if banks do increase their reserves to cover riskiness (or decrease reserves in order to take advantage of profit opportunities, and become riskier), there will always be potential borrowers willing to enter into financial debt. It is here that money can be seen to be always 'credit-led and demand-determined' (Moore, 1988). Here, if this assumption is accepted, then money can never be in a situation of excess supply, where, if such a situation occurred, neoclassical exchange market theory would hold that interest rates would adjust downwards to clear the excess supply. Second, bank credit is always required, even when the economy is not expanding. This happens because borrowers must repay their bank loans with the proceeds of the sales revenues that their production generates, and in order to renew production, even at perhaps reduced levels, will still require some borrowed funds to do so. And, third banks do not necessarily or automatically become riskier as their loans expand, because they usually only lend to creditworthy, and so mostly profitable, borrowers. Moreover, provision for the bad debts of even creditworthy is normally made, and is normally built into the cost structuring of banks as well as being tax deductible in many countries, although they also have to somehow plan for the type of unforeseen macroeconomic, or market-systemic shocks, that affect all borrowers and lenders.

Even though these differences between the Horizontalists and Structuralists are real and problematic, substantial arguments can be put forward for a common and coherent approach by all post-Keynesians in order to offer a meaningful alternative to neoclassical theory.

Following Rochon and Rossi (2003), the first two key elements are the role of effective demand and endogenous money, which form the cornerstone of the overall post-Keynesian approach. If, as promulgated, production is carried out through, and therefore directly related to, bank loans, and if wages as the cost of productive labour are paid, or accounted for, before production commences. Then the theory of effective demand and endogenous money actually become flip sides of the same coin. In this way, all post-Keynesians agree on at least an endogenous component to money, regardless of whether it is directly related to increased output or not. Bank loans always result in a quantity of money, which, in turn, create bank deposits that also increase banks' reserves. Given then, these two components it becomes easier to incorporate other elements of post-Keynesian into an acceptable whole. The distribution of income can be allowed to play a part in adjusting levels of aggregate demand; and if increased aggregate demand translates into an economic growth that is demand-determined, this needs to be included in the approach. In this way, increased investment, expanded levels of public expenditure, and higher wages, will all have a positive impact on aggregate demand

The rate of short-term interest, as set by the central bank, may also have a role to play, because interest rates whilst not necessarily having a direct influence on aggregate demand through investment; may well have an indirect impact on income distribution. This point leads to the question of the financial markets and what their actual function is. As with the elements above, do they have an influence on aggregate demand? And, if so, how may this work. Apart from Minsky and other like-minded Structuralists, the post-Keynesians have rather overlooked the precise role of the financial markets in relation to their analysis of money and aggregate demand. And finally, politico-economic uncertainty should also be included in the overall analysis, as propounded by the American post-Keynesians. Mixtures of a disproportionate fear of the future, undue attention to the unknown behaviour of key economic variables over time, and disregard for the potential incidences of unexpected and asymmetric external economic shocks, may directly affect the efficacy of investment decisions made or delay feasible investment projects and potential subsequent related consumption levels. Such uncertainty may also engender spillover effects on the financial markets in the guise of reduced, or reducing, confidence in the markets themselves leading to perceived and real market instabilities. Perhaps even more importantly, conditions of uncertainty may adversely affect not only the demand for loans, but also the willingness of banks to supply loans. This is not to say money should be considered as supply-determined,

as banks clearly can only extend loans to borrowers that request them; there is no known or legal mechanism for forcing loans on to unsuspecting borrowers. However, under conditions of particular levels of uncertainty, banks may be encouraged to be more pessimistic about borrowers' stability in general, and also their ability to repay loans in particular. Often, these levels of banks' uncertainty are associated with an economic downturn and therefore a diminution of aggregate demand and associated output. In this way, and because the world is non-ergodic, all economic agents, governments; central banks; commercial banks; firms; and households operate under the spectre of uncertainty, and although they will all have individual tolerances and attitudes to such uncertainty, this will affect these agents' decisions to save, lend, consume, and invest.

The Monetary Circuit Approach

Based on the circular flow of production and consumption by households and firms, which is one of the oldest aspects of economic analysis, the Monetary Circuitists attempt to establish the nature of the flow of money around national capitalisms' economies, and to analyse the related circular flow of income. Within the school linkages have been identified between the generation and utility of income on one hand, and the creation and destruction of money on the other.

As its name suggests the theory of the monetary circuit is first of all a theory explaining money from its creation by the banking system to its destruction by the same system. This flow takes place within a logical sequence over time, and circuitist commentators separate it into a number of sequential phases, which link together from the opening to the closing of a loop, or defined circuit of monetary activity. From this, the Circuitists identify the central problem of, or set of challenges caused by, the circuit being what is called as temporarily 'open'. As Realfonzo (1998:16) observes 'until the moment in which in which firms are in a position to repay the banks, a stock of money remains in existence, a double debit/credit relation between firms banks on the one hand, and between banks and workers on the other'. Circuitists consider that the formation of money stock poses a problem for firms, taken here as a collective in the economy, because such a money stock ultimately obliges them to renegotiate their loan commitments with banks; and this may lead to less favourable borrowing conditions for those firms that are not able at that point in time to settle existing outstanding obligations. The principal result of this situation is that these firms will then need to support greater costs for producing a given output in the following periods. And, at the

macroeconomic level, failure to pay existing bank debt may lead firms to cut back on other costs such as their wage bill, which adversely affecting unemployment levels, and from there, aggregate demand and economic output. Although quite different in context and texture, the framework for the monetary circuit explanations of money bears a number of similarities with the post-Keynesians, as well as some notable differences.

Similarities and differences between monetary circuit theory and post-Keynesian theory

Both sets of explanations share a number of important features and characteristics, which is encouraging for those from both camps who actively promote the notion of a single, encompassing, and coherent approach for the heterodox views of the endogenous function and behaviour of money, and its interdependent relationship with aggregate demand and output, as part of the workings of modern national capitalisms.

The encouraging level of similarities begins with the general acceptance by all schools across the two strands of the central importance of bank credit in terms of setting the process in motion, and for its continuing expansion. And, although for the post-Keynesians the creation of money is 'congenital to production' (Rochon and Rossi, 2003), whereas, for the Circuitists the creation of money is contingent on output expanding and the economy growing, both camps agree that banks are essential for the coterminous production and consumption relationship. Moreover, they agree that bank money is endogenous to national capitalisms because it is credit-led and demand-determined. Within the post-Keynesian monetary economics, the Horizontalists come very close to the position generally held within the monetary circuit theoretical framework, where both share the view regarding the creation, circulation, and destruction of money within modern national capitalisms.

In addition, both post-Keynesians and monetary circuit commentators alike, support the notion of partial and sequential analyses of macroeconomic outcomes and asymmetries, whilst wholly rejecting the very narrow neoclassical imperatives relating to market clearance, and general and simultaneous equilibria. And, although neo-Keynesians privilege the focus on time and uncertainty, in contrast to the Circuitists' main concern for issues surrounding the macroeconomic problems relating to different classes of agents and their varying positions and influences on the macroeconomy, they are both interested in the partial, or whole, relationships between aggregate demand and income distribution. In particular, they both favour the reverse causality view regarding the interface between microeconomic forms of behaviour and macroeconomic phenomena, where the neoclassical view holds that

microeconomic behaviour directly shapes the macroeconomic landscape. Finally, both also agree on the exogenous role of the interest rate as a macroeconomic variable. Here, it is jointly held that the central banks can control interest rates much more effectively than they can control the total money supply. And, in particular, through this channel, the central banks can play an important role in manipulating interest rates to enhance recovery phases of the business cycle, and to boost unemployment during such downturns.

However, there are also significant differences between the two approaches regarding the actual function of money in modern national capitalisms. While the advocates of the monetary circuit model emphasise that money functions as 'final payment' mechanism within an economic system of production and exchange, and importantly note that there may also exist groups of individuals who have no access to this mechanism because of their low social status, the post-Keynesians hold that money should be considered as a stock of liquid wealth which economic agents may use to overcome differences between current and future financial contingencies brought about by uncertainty and individual liquidity-holding preferences.

These differences need not be terminal. As Graziani (1996) observes, this difference could form the basis of agreement between the camps, where the distinction between the two views on the fundamental function of money may be moved ahead of, and to build a general theory of the monetary production economy that explains money as a means of payment as well as money as a stick of wealth. And here, it could be argued that if money is a stock of wealth, then it has the inherent capacity of being available as a means of payment.

As well as converging on the *function* of money within the workings of national capitalisms, both sides also need to address and hopefully come to some agreement on the *nature* of money in national capitalisms. And, as pretty much all else depends on this, it is essential for the potential of a common approach between the two camps, and then the question of what money actual is cannot be subjugated by the other points of disagreement. Therefore, we commence with a dichotomy: if money is a store of wealth, it is then clearly, in this view, a static stock of money; if money is a means of payment, and its creation, circulation, and destruction occur in a circular flow, it is a non-static flow. The question is, can this apparent polarisation be overcome? Perhaps it is both, with flows of money emanating out of static stocks, or static stocks being somehow the residual of a particular flow that has come to a halt, depending on the type of analysis being conducted. But can this proposed dual nature of money be seen as satisfactory?

The main stumbling block in the debate in the heterodox literature regarding the nature of money appears to be that money either has to be a temporary, and therefore, static, store of value or wealth (accumulated income), or is a flow, and therefore a dynamic, and readily available (liquid) means of payment. The obvious and simplest way to overcome this problem is merely to state that the nature of money to the observer depends on the type of analysis required. To use the example of the dollar bill on the pavement story, if a passer-by observed dollar bill on the pavement, a neoclassical economist would argue that you would never see someone observing a dollar bill at because it would be picked up immediately without thinking, a post-Keynesian would also pick it up fairly quickly because it is recognised as a store of value, and the post-Keynesian would now have an increased store of wealth equal to the denomination of the bill. The circuitist would also pick the note up quickly, but for this observer, the gain would be seen as increasing his or her capacity to make increased payments in the short-term future. In essence, the last two fortunate observers of the dollar bill are viewing the acquisition of the money in different ways, because for them, at that particular juncture, and by their differing analyses, the money satisfied different needs or wants. So it could be argued that the nature of money changes only on analytical and temporal grounds. The circuitist will actually hold the note as a store of value until such time as it can be used to make a payment, and the post-Keynesian has received a means of payment which will be held as a store of value or wealth, albeit in the short, or very short-term. Ultimately, it is human efforts of production and choices of consumption that determine the nature of money, and all transactions and expenditures of any meaningful import, always must relate to these human interventions. (Adapted from a passage in Keynes's *Treatise on Money* (1930/1971))

However, to many commentators this duality still does not conceptually satisfy the central question, and it is to a particular group of writers, those proponents of the theory of money emissions, that I now turn.

The Theory of Money Emissions

This approach can be seen as a the result of a breakaway group of monetary circuit writers from Italy, France, and Canada in the 1970s, who now share very little of the mainstream circuit writers' views, other than that their overall focus is the same, a heterodox account of how the monetary production economy works, and the function of money within it. Now recognised as the Dijon-Fribourg school, this movement centres its main argument on money

being a flow, but an instantaneous flow, that results from the double-entry mechanism used to record transactions in a banks' system of accounting. In this view, money is integrated into the real economy through production, where it is the payment of wages that allows money in its numerical form to relate to output, its real content. In effect, this means that money and productive output are two sides of the same coin, and that produced goods exist as (residual) wage-units as soon as workers' wages are paid into banks by firms. The banks record these transactions as deposits, which is where they stay until workers withdraw these monies and spend them in markets for produced goods. Here, the value of money is created by this relationship between productive activities and banking systems, or more simply, the integration of banks and production. In this way, productive outputs become instantly monetised by the banks. Therefore, the payment of wages is an emission where money income defines an exchange value that sits in a bank as a deposit. The theory goes further to explain that as these wages are paid by out by firms that have borrowed from banks in order to finance the very production that has resulted in the wages being paid to workers in the first place, and that the deposits are destroyed as soon as workers spend them in the form of money exchange in markets for produced goods. Moreover, other quantities of these deposits are also circulated around the macroeconomy as a result of banks' other financial market intermediary activities. As Schmitt (1986) states, 'effective demand is defined as a two-way flux, firms giving and receiving the same product'.

Similarities and differences between the post-Keynesians and Monetary Circuitists

There are some similarities between the approaches. First, all the heterodox schools address the main problems of the modern monetary production economy. In particular, the relationship between unemployment and lack of total demand is shared by all the approaches. Second, the schools collectively focus on issues surrounding capital accumulation and (asymmetric) income distribution. Third, there is also a cross-approach consensus on the reverse causality of microeconomic and macroeconomic phenomenon. That is, they all share the view that macroeconomics are not based on microeconomic foundations, and that macroeconomic phenomena and interrelationships cannot be reduced to, or analysed by, simple economic aggregates.

However, although these commonalities are important and can be seen to constitute some elements of a basis for the eventual unification of the heterodox approaches on a number of issues, there remain fundamental, and perhaps more importantly, conceptual differences,

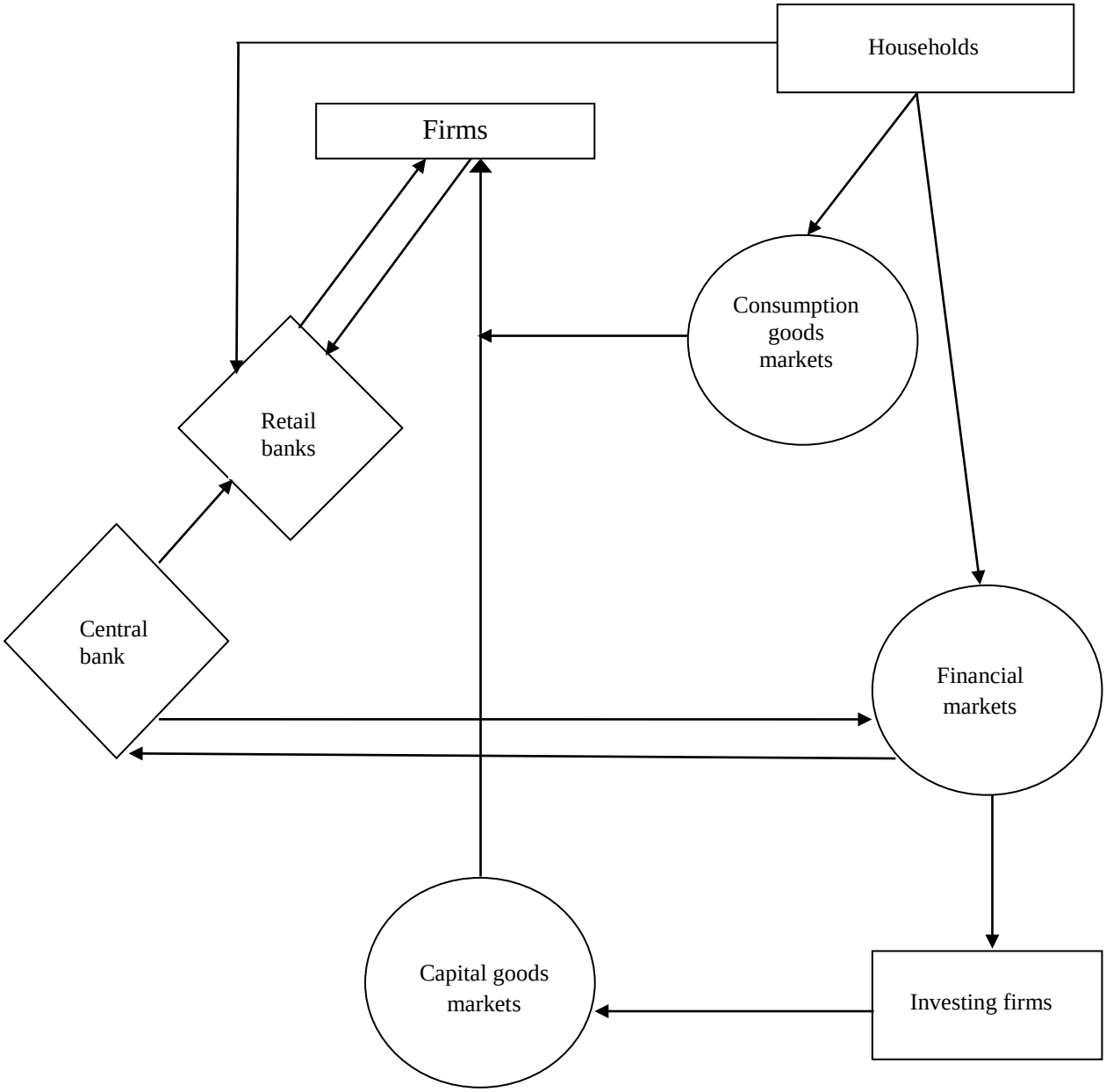
brought about by a radically different view regarding production and income, and one which more closely resembles the neoclassical view. These departures can be summarised as follows. Firstly, the emissions position rejects the notion of income as a flow of expenditure over time, choosing to consider it as a stock, but one that is constantly renewed via a process of creation involving money and the production of goods and services. Secondly, Schmitt and his followers believe macroeconomics has little to do with the economy's agents' behaviour, and therefore there is no point in relating uncertainty and liquidity preference to the true endogenous nature of money. Thirdly, the school's own 'quantum theory of production' (Rochon and Rossi, 2003) is promulgated to replace any semblance of the idea that income formation takes place in a temporal framework or sequence, because in the payment of wages, the quantum theory holds that output is emitted as an amount that is *simultaneously* real and monetary. Real, in the sense that it is the result of a physical process of transformation that creates a value-in-use; and monetary in as far as it is emitted within, and by, the payment of money wages, which, in turn, are seen as the real measure of output in economic terms. This means that income is automatically created when these wages are paid into the bank by firms, and destroyed when workers withdraw them and buy finished goods in markets. And finally, general rises in aggregate price levels in contrast to other schools, are believed to be the result of the mixed structures of domestic and cross-border payment systems whose operations do not yet adhere to the above double-entry explanation of modern money and its conceptual difference to income and capital.

Summary

Having put forward the case for the monetary production economy model as an alternative means of considering the functions of national capitalisms as individual units of analysis, the notion of a collective and centrally-managed EU supracapitalism demands a conduit between the role of money, as the prescribed endogenous and central feature of national capitalisms, and the promotion of how this view of the role of money in capitalist economies may be the basis for the promulgation of an EU supracapitalism. Firstly, Figure 23 below shows how an adapted version of the monetary circuit view of money serves as one attempt at the unification of the monetary schools as discussed above, and Figure 24 represents a revised version of the illustration in Figure 22 above.

Figure 23

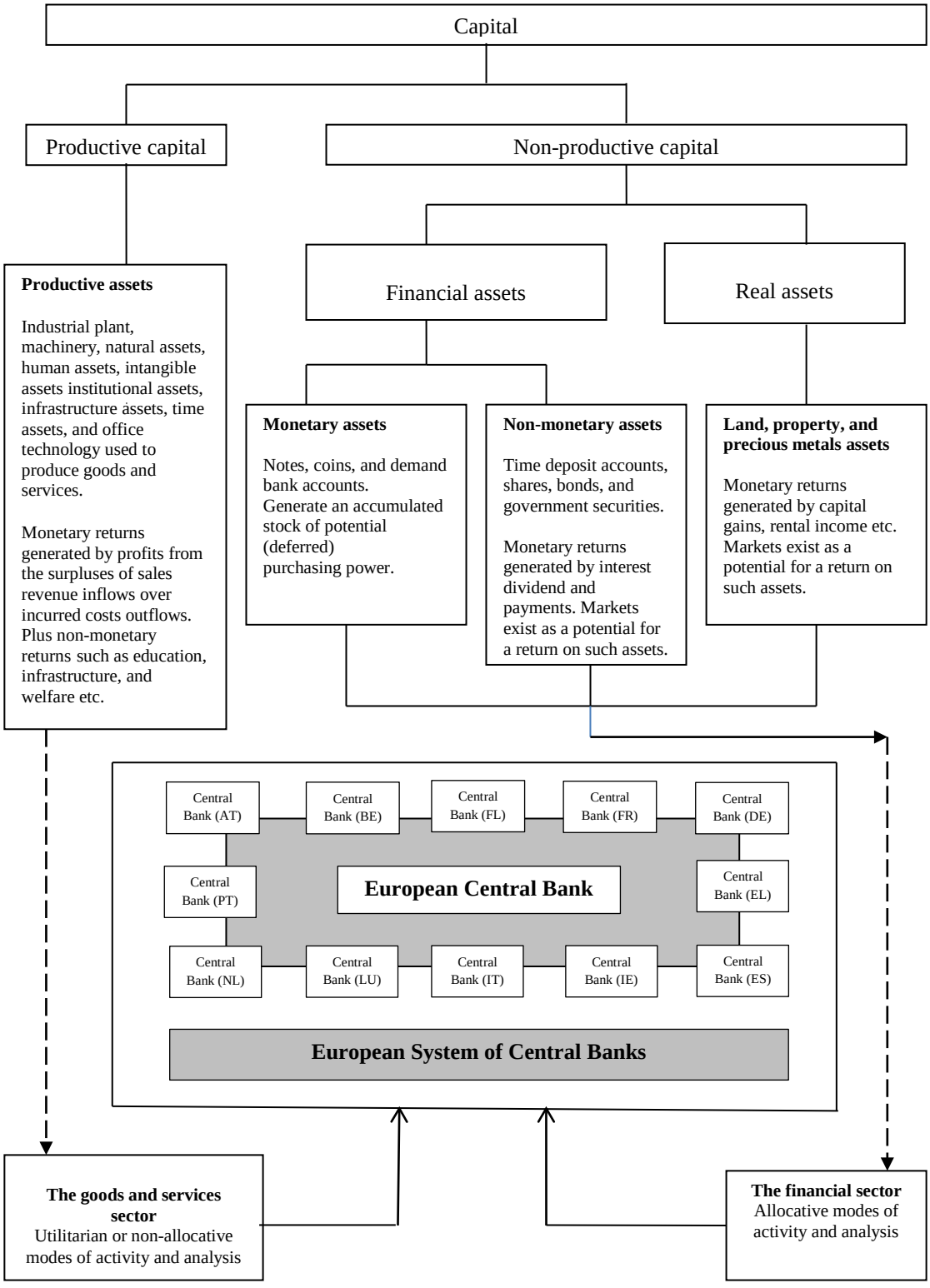
The flow of funds in an adapted monetary circuit model



Source: author's adaptation from Rochon and Rossi (2003:145)

Figure 24

Illustration of the Eurosphere Monetary Production Model



Source: primary

Conclusions

Assessing the potential for an EU supracapitalism effectively rests on the evolution and performance to date of a Eurosphere as a self-contained macroeconomy, largely controlled by the ECB. For its part, the ECB effects the management of the Eurosphere by means of a single-policy monetary strategy designed to both consolidate the existing extent to which economic integration has been accomplished, and also create the conditions under which further economic and monetary union can be realised in the future. From the findings of the research undertaken here, the degree to which complete economic and monetary harmony can be achieved depends on the extent to which there is a political will to reform the ECB, and therefore liberate the economies of the Eurosphere member-states to take full advantage of the dual benefits of EU membership and sharing the single currency. Furthermore, any ECB reforms need to be not only radical and immediate, but also accompanied by a wider EU recognition that if further economic integration is to be achieved, and the full benefits of sharing a single currency are to be enjoyed, any damage that future potential politico-economic crises must be minimised.

The creation of Eurosphere has been predicated upon monetary and economic union, with this being heralded by the commencement of Stage Three of EMU. However, any measurement of EMU's success to date has been limited to the extent to which the monetary integration part of the equation can been seen to have been achieved. The wider assessment of the potential for an EU supracapitalism is grounded in the projection that the bringing together of the 12 national capitalisms of the current Eurosphere may provide the necessary pre-conditions for its realisation. The previous chapters, in particular the passages chronicling its evolution, proliferation, and subsequent adaptations, capitalism is established as a politico-economic system, and therefore by extension a supracapitalism must entail elements of supra-political endeavour. Consequently, the main thrust of the arguments presented here is bounded by the monetary, the economic, and the political, but with the recognition that the Eurosphere's current evolutionary location lies somewhere between the first two, and where further progression is contingent on the latter.

The conclusions to the research can be considered to be delimited by three interrelated aspects of the development of the Eurosphere, and of its supranational policy-setting and

management by the ECB. The first of these concerns an assessment of the ECB's overall performance, where a patchwork picture of the empirical evidence and analysis emerges which indicates both positive and negative outcomes, and while this amounts to a largely inconclusive assessment of the Eurosphere, the results point directly towards a pressing need for the above-mentioned ECB reforms, which move away from the current single-policy focus and towards multiple and contingent policy formations. The second relates to these reforms, and calls for the EU to demonstrate the political will to more meaningfully move towards the fiscal harmony required for full economic integration. This will involve a reconsideration of the ECB's future form and function, and ultimately whether it can be mandated in some way to exercise levels supranational influence and control over the fiscal policy in order for the Eurosphere is to achieve the full economic integration intended by EMU. And, in doing so, these reforms will also need to see a significant reduction in the influence on the Eurosphere by the German Bundesbank's legacy.

And finally, it is important to remind ourselves what the EU was originally envisaged to achieve; something which is often obfuscated by the continuing focus on economic integration. The ultimate drive for political union may seem a long way off, if achievable at all, but it was aimed at deepening the synergistic and mutually-beneficial togetherness that was to offer all the members protection; protection from invasion (especially by Germany); from the threat of the spread of communism, and from the potential trade dominance of the US. And while it is not surprising that the contemporary focus is mainly on the economic gains to be shared from the single market, macroeconomic policy co-ordination, structural change, and regional development; the EU in general, and the Eurosphere in particular, are as much about economic protection. Economic protection means when a fellow member finds itself in trouble, the others come to assistance alongside; and this means financial support and backing. The recent history of Eurosphere crises tells us that this does not always transpire, and often national domestic politics and preferences intervene. Among other things, this could be due to the EU being split into to two zones: the Eurosphere and the ex-Eurosphere member-states, although as the empirical evidence in Chapter 4 suggests, there can be seen to be some cross-transfers of benefits between the two spheres.

The third interrelated aspect is then one of pursuing the necessary reforms to ensure there are the necessary safeguarding measures are in place so that the Eurosphere can be better equipped to obviate future financial crises. With this in mind, the subsequent concluding remarks are laid out with first a summary of the overall findings and individual conclusions,

together with an interpretation of each of the main chapters, followed by a closer examination of the fiscal policy issues, and finally an examination of ECB's and EU's handling of another recent financial crisis.

Summary of findings and conclusions

The task of establishing the potential for an EU supracapitalism, considered though a constructivist-neoinstitutionalism mix of political science and international relations explanations, demands a great deal of both the available literature and data. The treatment of the literature here was mainly distributed across three chapters: one developing the constructivist-neoinstitutionalism framework, another focusing on EU integration, and the third based on a challenge to the accepted wisdoms that explain both the function of national capitalisms and the role of money in those economies. The available datasets from which the empirical evidence was distilled are voluminous, although largely unrefined, and whilst following Colin Hay's advice to be necessarily 'empirical, though not empiricist' (Hay, 2002a), maintaining an adequate theoretical-empirical balance has been a major challenge throughout. With this in mind, an initial summary of findings and accompanying individual conclusions can be outlined below.

Beginning with the literature, the first discovery was the initial separation of the understanding of wealth into the real and the virtual, which correspond to productive assets and financial assets respectively. In turn, productive assets can be seen as largely non-allocative in nature, while most financial assets are allocative. And from this, the opportunity arises to subsequently mount a critical challenge to not only the generally-accepted, but also ECB-acknowledged, view of how national capitalisms function. This affords a framework which both offers a heterodox view of countries' economies, and also a methodological basis from which to critical assess the effectiveness of the ECB and the political economy of the Eurosphere.

Understanding the nature and characteristics of national capitalisms as politico-economic systems presents a number of challenges. The first of these relates to capitalism's continuing success over the last 300 years or so, regardless of its episodic failures and resultant domestic and world crises. The second concerns widely varying national interpretations of its basic accepted tenets. Capitalism's on-going success appears to lie in governments' and policy-makers' acceptance of both capitalism as being the only available (current) viable politico-

economic system in general, and the neoclassical version of how capitalism is translated by national economies, in particular.

Although numerous and varied, the commentaries on EU integration point to some clear reckonings. That the 'governance turn' coincided with the emerging international relations prominence of constructivism and the new availability of a range of neoinstitutional methodologies, affords a more clearly-defined analytical framework than that of the foregoing neofunctionalist-intergovernmentalist debate, is particularly important. This is not to say that that the constructivist-neoinstitutionalism approach favoured here comes without its problems. Constructivism is revealed either as more of a collection of theories bounded by the privileging of the fluidity of ideas, interpretations, and discourse, than the more closely-described and dichotomous pre-governance-turn theoretical positions. The choice of constructivism as a means of understanding the Eurosphere as unfolded in Chapter 5, whilst generally challenging the rational family of realisms, also entailed having to pragmatically employ three of the identified 'constructivisms' in order to consider the international relations aspects of the EU. The neoinstitutionalist political science side of the approach also demanded consideration of a mix of variants, and where the opportunity presented itself to take advantage of its sociological, historical, and empirical variants in the design and justification of the EU typologies as an analytical framework for the longitudinal and statistical evaluation of the 20-year pre and post-euro timeframe.

The literature focusing on EU integration and Europeanisation reveals both the helpful, clearly-defined pre and post-governance turn, but also widely contrasting, and at times confusing, perspectives of events and potential trajectories. Nevertheless, the main conclusions that can be gleaned here are that a dual-speed EU of a Eurosphere and ex-Eurosphere economy will persist for the medium-term at least, although the extent to which there will be developing cross-benefits and eventual convergence remains unclear. What is clear is that the ten new acceding economies constituting the fifth enlargement will significantly reshape this dynamic. With all of these countries contracted to adopt the euro in the short-term, the previous 12-3 structure of the EU will become a 22-3 and then 24-3 when Bulgaria and Rumania join in 2007. As the Eurosphere expands in this way, the non-Euro economies will become increasingly influenced by the euro economies, not least because of the evidence regarding intra-EU and extra-EU trade openness (See pages 146-152); and that within the newly-expanded Eurosphere, there is possibly the potential for multiple-speed configurations either based on the kinds of typologies discussed earlier, or those that may be

shaped by future contingent political alliances, the potential for which is discussed by Hooghe and Marks and De Gruawe and others on pages 168-173. Whatever unfolds in this regard, one thing is inevitable; that crises, notably financial crises, will always be a feature of a partially-integrated EU, and that the full political union that would largely obviate these is either so far off it is difficult to envisage at this stage, or is ultimately unachievable.

The varieties of capitalism literature is at once helpful and seriously limited, although elements of this have been 'borrowed' here from the seminal Hall and Sosckice book of 2001, there are a number of problems with it as a genre. The first, as advanced by Colin Hay and others, is that each variety must be considered contextually-contingent, and therefore fluid in nature, and consequently always in a state of flux (France, Ireland, Spain, and Poland all being contemporary examples). This is because national governments are subject to episodic changes in political form and function, and because capitalism is a form of politico-economic organisation, the nature and characteristics of national capitalisms must continually change. Furthermore, Lippit's Social Structures of Accumulation shows us not only how national capitalism's change as result of shifting government ideologies, but also because of the regional and international shifts brought about by transnational social, technological, and financial developments. Nonetheless, by default, what this body of literature does point to is the need to recognise that understandings of national capitalisms should always be contingent, and as such any resultant typologies cannot remain static in the long run. Therefore accepting that capitalisms do vary in these ways highlights what needs to be achieved in order to successfully integrate; and also what may prove to be very difficult to accomplish.

The theme of understanding national capitalisms leads to another important outcome from the literature, and is rooted in a challenge to the very nature of how a national economy functions. In many ways, considering the heterodox explanation of the form and function of national capitalisms, as propounded by Gerard (1989), is akin to either inversing the image of what a national capitalism looks by standing on one's head to view it, or more realistically to contest the direction of the internal cause and effect relationships which determine the outcomes of a national economy's operation. This alternative, 'ideas and discourse' approach to grasping the rudiments of national capitalisms can be seen as philosophical, neoinstitutionalist, and constructivist. It is philosophical in the sense of the simple definition offered by Honderich

> The shortest definition, and it is quite a good one, is that philosophy is thinking about thinking. That brings out the generally *second-order character* of the subject, as reflective thought about particular kinds of thinking – formation of beliefs, claims to knowledge – about the world or large parts of it (1995:666).(emphasis added)

In short, Gerard offers a different, second order, view of national capitalisms. This view is taken here to be of central importance, especially in the light of both the narrowness of the ECB's failing single-policy strategy being a direct consequence of EU policy-makers following a singular and unchallenging view of how European capitalisms function, and the accompanying monocular view of the role of money in those economies. Gerard's take on how national capitalisms works can also be seen to be neoinstitutionalist in nature. This is evidenced first by reference to Table 6, where we can specifically identify the 'overtly critical stance' and the 'Interdependent' and 'embeddedness' features of the monetary production view. Additionally, with reference to the spectrum of neoinstitutionalist variants in Figure 4, Gerard's account can be aligned with the empirical, historic, and normative aspects of the continuum. And, the positing of the monetary production alternative shares elements of Wendt's eclectic 'thin end' of constructivism, especially with the idea of states being individual units of analysis, although not in the conventional neorealist sense, but as regards not being subject to the exogenous ECB interventions of money, and by creating money demand from within the economy. And, the social constructivism position of Hacking is visible within the monetary production version via the view that the capitalist economy follows a broader explanation of economic phenomena in general, and the workings of national capitalisms in particular. Central to these ideas is the view that the behaviour patterns of household, firms, and individuals differ from those found in neoclassical theory, and that the non-allocative modes of economic activity, those that describe socio-economic activity and which are apparently ignored by contemporary EU economic planners, are not pre-determined or predictable as the proponents of rational analysis assert. Finally, on the constructivist aspect of the monetary production perspective is the less obvious but importantly radical view of an imagined (alternative) European 'economic space' introduced by Ben Rosamond. Here, the constructivist idea that the European economic space can be imagined differently falls in line with Gerard's upside down view of individual national economies that can be extended to the collective of Eurosphere capitalisms through envisioning that the creation of money flows is a product of both allocative and non-

allocative modes of economic activity. And, that because of this, the ECB strategy of privileging price stability via the exogenous monetary control of the Eurosphere interest rate above all other macroeconomic measures, especially those that may stimulate demand and create jobs, is both seriously limiting and potentially injurious to the wider EU economy.

A major strand of Gerard's critique of the general understanding of capitalisms is the role of money in a modern national economy, and the attendant issues of neutrality and non-neutrality. This leads to the closer examination of modern alternative theories of money in the same chapter, and the identification of two sets of thinking about money in a national economy: the Post-Keynesians and the Monetarist Circuitists. The four individual schools of the Post-Keynesians (See pages 209-210), can be analytically paired into the Structuralists and the Horizontalists; and the Monetary Circuitists similarly fall into three sets comprising the Italian School, the French Circuit School, and the Dijon-Fribourg School (See pages 210-211), that can be seen to offer either a Circuitist or Monetary Emissions view of money in a national economy. Although with many differences and similarities to note, both within and between them, all the four collectives demonstrate a number of significant commonalities, and all of which can be applied to the Eurosphere as a platform for an EU supracapitalism. And, it is the similarities that together allow a choice to be made that could be either a bespoke hybrid or straight selection of the models on offer. Bearing in mind the uniqueness of the EU and the Eurosphere, it is not then unreasonable to opt for a blend of understandings of money that would fit a reformed ECB.

The ECB should then be guided by a policy framework that accepts the above awareness of the role of money. That money is neither exogenous nor neutral in relation to the function of national economies, rather it is both endogenous and central to the operation of national capitalisms; it is demand that creates the commensurate levels of supply in an economy, and it is this demand creates the necessary volume of money flows, and therefore the amount of money required. Also, that macroeconomic activity is not based on microeconomic foundations, and that macroeconomic behaviour cannot be understood or analysed merely as a set of economic aggregates.

The analysis of selected macroeconomic variables over the 20-year pre and post-euro period, as advanced in Chapter 3 is predicated on a contextually-contingent group of typologies of EU national capitalisms. The first question here is to what extent can these prescribed formations be justified, in the sense that any sample size 'n' could be taken as n=1, where all

EU national capitalisms are seen to be the same; n=8 as in the typologies selected here, n=12, where the all the Eurosphere countries are separated as a group, but analysed as individual units, or n= 25 to include all EU member-states economies as individual units of analysis, and so on. The second question is can such typologies offer any real analytical utility anyway, and if this cannot be answered, why bother at all with typologies?

The broader varieties of capitalism literature discussed above seems to answer these questions by pointing to a number different ways to the concept of contextually-contingent analysis. In other words, typologies offer significant analytical utility if, and only if, the collectives have a basis, and that there is a rationale and an internal logic for their groupings. In the 'varieties' literature many such collectives are identified, and are typified by a wide range of contextually-contingent rationales that include geographical, geo-political, political, historical, military, politico-economic, socio-economic, and temporal strategic alliances.

The typological logic employed here is based on the relationship, and potential relationships, that the ECB may enjoy with similar groups of EU capitalisms. Obviously, the Eurosphere and non-Eurosphere member states are an automatic sub-grouping, as are the Former Eastern Bloc economies, the Baltics, the Benelux countries, the Southern European economies, the Nordic economies, and the Rhinish-influenced economies. However, as well as recognising this, two more levels of collectivisation can be added: those relating to the direct and indirect influence of other national economies, in the way that the UK influences Ireland, and Germany sways Austria; and the extent to which national governments choose the level of their involvement with the economic activity of their firms and individual citizens, as is the case with France and Germany. All of these factors have shaped the selection outlined in Chapter 3. The main conclusion here then is that privileging the method of similarity within comparative political economy over the method of difference (where n might equal 25), as advocated by Strange (1997); Neal and Barbezat; Dicken, (1998); Esping-Andersen (1990); Smelser (1971); and Pontusson (1995), for EU analysis can be justified, but with the caution that it is difficult to envisage a method, whether typological or non-typological, that would be able to capture a universal analytical framework for all purposes, at all times; and therefore that must then point to the need for purpose-specific, contextually-contingent analytical frameworks.

Finally, the empirical analysis of Chapter 4, and the assessment of ECB's post-1999 performance on pages 186-195, can best be described as inconclusive overall, but at the same

time clearly pointing to the limitations and inadequacies of the ECB's single-policy focus, and therefore the effectiveness of this level and type of EU institutional supranationalism. And, this is largely due to the extent to which the monetary integration aspect of EMU has been achieved by the ECB, as the institution charged with its accomplishment, and how much of this has translated into the economic integration planned for, but for which under its present remit, the ECB is severely restricted.

Moreover, because of these shortcomings, it is difficult to meaningfully project the possibility of the Eurosphere as an EU supracapitalism in the medium-term, or even maybe long-term, unless there are radical reforms of the ECB in terms of both the scale and scope of its policy-formations, and a more comprehensive and empathetic understanding of how EU national capitalisms function, alongside the establishment of a coordinated fiscal mechanism, of which the ECB must have some influence on, but not necessarily complete control over.

The problem here is an existing gap, or a level of incompleteness, between monetary integration and adequate pre-requisite economic integration, that can only be achieved with the leverage of a coordinated supranational fiscal policy framework. This then raises two more problems: on this basis EMU can only go so far without fiscal coordination; and that fiscal co-ordination is a major political issue, but where the original plan was to achieve full economic and monetary union *before* effective political union can be envisioned. This means we are effectively presented with an interface between the economics of monetary and fiscal policy and the politics of Eurosphere tax harmonisation. The relationship between monetary integration and national fiscal policy remains problematic for the Eurosphere. This is because at the present time national governments are comforted that they have a fall-back position by retaining domestic control over their public finances, borrowings, and the formulation of their own tax regimes – regimes that are still perceived as both politically sensitive as well as being aligned to individual national socio-cultural trajectories.

The inevitability of Eurosphere crises without fiscal coordination

Whatever the exchange rate regime, a country's budgetary policies will have international external effects. In a regime where exchange rates are either flexible, or where governments occasionally resort to artificial currency realignments, an increase in domestic demand caused by a fiscal expansion is reflected in movements in the currency of the initiating country. If exchange rates are fixed, these external effects change nature as the exchange rate adjustment buffer disappears. Potential spillover effects of a different nature arise when large deficits in

one Eurosphere country affect the savings and investment balance of the entire euro area, or when a Eurosphere national government that cannot service its debt either leans on the ECB to obtain lower interest rates for all the single currency members, or applies for an individual cash bail-out. This is the basic academic argument in support of Eurosphere-wide fiscal co-ordination, but it inevitably must come down to the publication, and subsequent supranational enforcement, of upper limits on deficits and debts, as originally laid down at Maastricht where the failed Stability and Growth Pact was spawned. If there is neither fiscal coordination, or at least some level of tax harmonisation as an interim measure, Eurosphere crises are inevitable. As a footnote to the conclusions of this thesis, the unfolding events of May 2010 offer both support to the above arguments, and also a cautionary tale.

Greece had six months earlier been bailed out as Ireland found itself in similar difficulties. Investors nervous about a small European country with ballooning debts and uncertain prospects started selling its bonds. 'A surge in bond yields infects other countries in a similar (if less urgent) manner it feeds doubts' (*The Economist*, 2010).

Ireland's economy, at the time referred to by commentators as the 'Celtic Tiger', had been growing at a fast rate, but it paid too little attention to its overly-speculative banks and asset markets. A property bubble blew up, and Ireland became dangerously dependent on the revenues that flowed from it. The country's financial regulators were incompetent at best. And, at the first sign of trouble, the government made the mistake of issuing a blanket guarantee for all its banks' debts, which meant that taxpayers had to bear the catastrophic losses on property bets made by Anglo Irish Bank and others. Ultimately, this pushed the budget deficit to 32% of GDP. Moreover, Ireland had long been flirting with a debt crisis of its own, but it has not been helped by the other Eurosphere members. To begin with, the rescue of Greece mentioned above was a botch: it had fudged the obvious issue that Greece would never fully be able to repay its debts on time, if at all; and, the temporary support scheme cobbled together for the rest of the Eurosphere was equally flawed - in particular, it was too easy on private creditors.

At an EU summit at the end of October the German chancellor won agreement that any future Eurosphere rescue scheme should include a mechanism for a structured sovereign-debt default mechanism. The principle was absolutely right; unless default is a possibility, bond investors have no reason to distinguish between good and bad credits. However, the ideas of making bond-holders lose money when sovereign credits turn sour was aired without any

guidance about how and when it might apply. To make matters worse, the Germans failed to put together a detailed proposal outlining the above structure for the summit.

There was a knock-on effect with Ireland, Greece, and now Portugal all trying to deliver austere budgets for 2011. Bond-holders were invited to fear the worst, and subsequently the Irish were under increasing pressure, with the Greeks and others on tenterhooks. An Irish problem had quickly become a Eurosphere problem - and a UK worry, too, given its close links with Ireland, the only other LME in the Eurosphere. Additionally, the proposed solution, when it came, demonstrates how different Ireland in fact is from Greece, which at the time was pleading for money from a reluctant Mrs Merkel. This time the argument is between the Irish, who have insisted they do not need a bail-out, and some of the large Eurosphere countries which insist they must take one.

The Irish were right in that that they had enough money to last until the middle of the following year, but they could face runs on their banks long before then. Moreover, the Irish were also suspicious of intentions in Brussels and Berlin. Too much of the EU's motivation seemed to be to punish Ireland for its liberal market, 'Anglo-Saxon', ways especially its highly competitive 12.5% tax rate on corporate profits, which helped it attract foreign firms in the first place. Raising this would have been be illogical, especially as Ireland was planning budget cuts for the next year of 3.8% of GDP; 'any economy would struggle against that headwind' (*The Economist*, 2010)

Academics and other influential commentators argued that European rescue funds should be used to stabilise Ireland's banks, insisting only on certain budget targets in return. Such a deal would have satisfied Ireland's Eurosphere partners, which preferred an end to the uncertainty, and also the ECB, on which Ireland's own banks had become overly reliant for funding. It would also have been wise to offer a similar deal to Portugal, with its banks then also dependent on ECB support, and also facing significant falls in confidence from the bond market

Could the euro survive? For all the talk then of the euro failing to survive this sovereign-debt crisis, it would be able struggle through. Despite the troubles on its periphery, the public debt of the Eurosphere as a whole is not particularly high by rich-country standards. The real problems are the absence of a credible plan to deal with errant countries (as the Germans had recognised), the structural imbalances between Germany and the less competitive SEE

members and, most of all, the poor growth prospects for those poorer, weaker Eurosphere economies, would be made worse by any fiscal retrenchment. And 'by being denied the possibility of devaluation, slow-growing countries like Portugal and now Spain would be looking for meaningful structural reform' (*The Economist*, 2010).

This crisis highlights both the problems a partially straight-jacketed ECB faces when fiscal problems arise, and also, as is the case here with Ireland and the Eurosphere southern European economies (SEEEs), that groups of member-states within the Eurosphere are different, and have to be managed in different ways. This leads back to the title of the thesis, and that although some potential for a supracapitalism can evidenced in part, any such development will require both a complete rethink about the ECB as a supranational institution, and the now necessary need to move closer towards the political integration that any attempt at a coordinated Eurosphere fiscal policy demands.

Closing remarks

The constructivist-institutionalist commentaries on pages 179-185 describe the unfolding nature of the Eurosphere as a political process, a path dependent process, a cultural process, and an evolving social process. These progressions are also interrelational, and together illustrate the potential for a Eurosphere type of EU supracapitalism in terms of ideas, discourses, and the unfolding of a clear Eurosphere identity. Whilst hopefully justifying the selection of such an international relations-political science method of viewing the EU, the ECB, and the Eurosphere, I would argue the euro area can clearly be seen to have evolved, in the seven years or so of its making, towards a partially complete capitalism in its own right. However, the fairly extensive empirical scrutiny of the ECB's overall performance, together with the existing and potential sub-structures (or sub-spheres) that characterise the Eurosphere at present, point to a much longer gestation period for the type of EU supracapitalism advanced in the opening passages. The title 'The Potential for an EU Supracapitalism' really implies the question to what extent can the Eurosphere become a complete and integrated capitalist economy - perhaps in a similar way to the United States? The answer appears to be an EU supracapitalism in the Eurosphere remains a possibility, but not a probability, without further and deeper political integration. However, it remains unclear as whether even this progression would address the wealth inequality that originally inspired this work.

References and Bibliography

Adler, E. (1997) 'Seizing the Middle Ground: Constructivism in World Politics' *European Journal of International Relations*, 3 (3), pp.319.363

Aguiar, A. and Martins, M.M.F.(2005) ' The Preferences of the Euro Area Monetary Policy-maker' *Journal of Common Market Studies*, 43 (2), pp. 221-250

Akerlof, G.A. (1984) *Economic Theorists' Book of Tales*, Cambridge: Cambridge University Press:

Albert, M. (1993) *Capitalism Against Capitalism*, London: Whurr

Alexander, S.S. (1962) 'Income Measurement in a Dynamic Society' in Baxter, W.T. and Davidson, S. (eds), *Studies in Accounting Theory*, London: Sweet and Maxwell

Anderson, P. (1974) *Lineages of the Absolutist State*, London: Verso

Anderson, P (1980) *Arguments Within English Marxism*, London: Verso

Anderson, P. (1993) 'Maurice Thomson's War', *London Review of Books*,

Andersen, S.S. and Eliasen, K. (1995) 'EU lobbying: The new research agenda' *European Journal of Political Research*, 27, pp. 427-441

Anderson, J.J. (1995) 'The state of the European Union: From the Single Market to Maastricht, from Singular Events to General Theories', *World Politics*, 47 (3), pp. 441-465

Aristotelous, K. (2006) 'Are there Cross-Country Differences in EMU's Effect on Trade? *The Journal of Common Market Studies*, 44 (1), pp. 17-27

Armstrong, K. and Bulmer, S. (1998) *The Governance of the Single European Market*, Manchester: Manchester University Press

Arthur, W.B. (1999) 'Complexity and the Economy', *Science (New series)*, 284 (5411), pp. ten7-109

Artis, M.J. and Buti, M. (2000) ''Close-to-Balance or in Surplus'; A Policy-Maker's Guide to the Implementation of the Stability and Growth Pact' *Journal of Common Market Studies*, 38 (4), pp.563-591

Ashworth, W. (1975) *A Short History of the International Economy Since 1850*, 3rd edition, Harlow: Longman

Askari, H. and Chatterjee, J. (2005) 'The Euro and Financial market Integration' *Journal of Common Market Studies*, 43 (1), pp.1-11

Au, K.Y. (2000) 'Intra-cultural variation as another construct of international management: a study based on secondary data of 42 countries', *Journal of International Management*, 6, pp. 217-238

Axelrod, R. (1986) 'An Evolutionary Approach to Norms' *American Political Science Review*, 80 (4), pp.ten95-1111

Baldwin, R.E., Beglof, E., Giavazzi, F., and Widgre, M. (2001) ' Eastern enlargement and ECB reform' *Swedish Economic Policy Review*, (8), pp.150-50

Barrell, R. (2007) *'The Future of Monetary Union in Europe'*, unpublished paper presented at the European Research Institute, University of Birmingham, March 8th

Baylis, J. and Smith, S. (2001) *The Globalization of World Politics*, 2nd edition Oxford: Oxford University Press

Best, S and Kellner D. (N/D) Kevin Kelly' s complexity theory; the politics and ideologies of self-organising systems. http://www.democracynature.org/dn/vo16/best_kellner_kelly.htm (accessed 19/6 2003)

Bieler, A. and Morton, A.D. (2001) *Social Forces in The making of the New Europe. The Restructuring of European Social Relations in the Global Political Economy*, Basingstoke: Palgrave

Blyth, M. (2003) 'Same as it Never Was: Temporality and Typology in the Varieties of Capitalism', *Comparative European Politics*, 1 (2), pp.215-225

Boix, C. (1999) *Political Parties, Growth and Equality*, Cambridge: Cambridge University Press

Borras, S. and Jacobson, K. (2004) 'The open method of co-ordination and new governance patterns in the EU' *Journal of European Public Policy*, 11(2), pp.185-208

Bouwen, P. (2002) 'Corporate lobbying in the European Union: the logic of access' *Journal of European Public Policy*, 9(3), pp.365-390

Boyer, R. 'State and Market: A New Engagement for the Twenty-first Century?', in R. Boyer and D. Drache (eds) *States Against Markets: The Limits of Globalization*, London: Routledge

Braun, D., Bullinger., A-M., and Walti, S. (2002) 'The influence of federalism on fiscal policy making', *European Journal of Political Research*, 41, pp.115-145

Brenner, R. (1977) 'The Origins of Capitalist Development: A critique of Neo-Smithian Marxism', *New Left Review*, ten4 (July/August), pp. 25-92

Brenner, R. (1985) ‘Agrarian Class Structure and Economic Development in Pre-Industrial Europe’, in T.H. Aston and C.H.E. Philpin, (eds), *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*, Cambridge: Cambridge University Press

Breslin, S. (2000) 'China: Geopolitics and the Political Economy of Hesitant Integration' in Richard Stubbs and Geoffrey Underhill, (eds), *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press

Budden, P. (2002) 'Observations on the Single European Act and ‘relaunch of Europe’: a less 'intergovernmental' reading of the 1985 Intergovernmental Conference.' *Journal of European Public Policy*, 9 (1), pp. 76-97

Bundesverband Deutscher Banken (1999) *Die EZB –Eine Norenbank auf der Suche nach Identität*?, Berlin: Bundesverband Deutscher Banken

Bulmer, S.J. (1998) ‘New institutionalism and the governance of the Single European Market’ *Journal of European Public Policy*, 5 (3), pp.365-386

Burgess, M. (2006) *Comparative Federalism. Theory and Practice*, New York: Routledge

Callaghan, J. (2002) 'Social democracy and globalisation: the limits of social democracy in historical perspective', *The British Journal of Politics and International Relations*, 4 (3), pp.429-451

Castles, F.G. (1994) ‘On religion and public policy: Does Catholicism make a difference?’ *European Journal of Political Research*, 25, pp.19-40

Castles, F.G. (1994) ‘On religion and public policy: The case for covariance’ *European Journal of Political Research*, 26, pp.111-115

Cerny, P.G. (1997) 'International finance and the erosion of capitalist diversity' in Colin Crouch and Wolfgang Streeck (eds) *Political Economy of Modern Capitalism*, London: Sage (Chapter ten)

Chang, Ha-Joon. (2010) *23 Things They Don’t Tell You About Capitalism*, London: Penguin

Checkel, J. (1998) ‘The Constructivist Turn in International Relations Theory, *World Politics*, 50 (2), pp.324-348

Christiansen, T. , Jorgenson, K., and Weiner, T. (1999) ‘The Social Construction of Europe’ *Journal of European Public Policy* 6 (4), pp. 528-544

Christiansen,T. (2002) 'The Role of supranational actors in EU treaty reform', *Journal of European Public Policy*, 9 (1), pp.33-53

Church, C.H. and Phinnemore, D. (2002) *The Penguin Guide to the European Treaties*, London: Penguin

Cichowski, R. (1998) 'Integrating the environment: the European Court and the construction of supranational policy' *Journal of European Public Policy*, 5(3), pp.387-405

Cini, M. (2003) *European Union Politics*, Oxford: Oxford University Press

Clift, B. and Tomlinson, J. (2004) 'Fiscal Policy and Capital Mobility: The Construction of Economic Policy Rectitude in Britain and France', *New Political Economy*, 9 (4), pp.515-537

Collins, R. (1980) 'Weber's last theory of capitalism: a systematisation', *American Sociological Review*, 45 (December), pp. 925-942

Colomer, J.M. (2002) Introduction, in Josef Colomer (ed*) Political Institutions in Europe*, 2nd edition, London: Routledge

Conesa, I.M. and Martinez, E.O. (2004) 'International financial analysis and the handicap of accounting diversity', *European Business Review*, 16 (3), pp.273-291

Contractor, N. (1998) Self-organising systems research in the social sciences: reconciling the metaphors and the models. http://www.tec.spcomm.uiuc.edu/nosh/icasost/nc.html (accessed 19/6/2003)

Cook, C. and Stevenson, J. (1988), *The Longman Book of Modern British History*, Marlow: Longman

Copeland, L.S. (2000) *Exchange Rates and International Finance*, 3rd edition, Harlow: Prentice Hall

Cowles, M.G. (1995) 'Setting the Agenda for a New Europe: The ERT and EC1992', *Journal of Common Market Studies*, 33 (4), pp.501-526

Cox, R.W., with Sinclair, T.J. (1996) *'Approaches to World Order'* New York: Cambridge University Press

Cox, R.W. (1987) *Production, Power and World Order* , New York: Columbia University Press

Crouch, C. and Streeck, W. (1997) 'Introduction: the future of capitalist diversity' in Colin Crouch and Wolfgang Streeck (eds), *Political Economy of Modern Capitalism*, London: Sage

Crouch, C. and Streeck, W. (1997) *Political Economy of Modern Capitalism*, London: Sage

Cutler, T. and Waine, B. (2001) 'Social Insecurity and the retreat from social democracy: occupational welfare in the long boom and financialisation' *Review of International Political Economy*, 8 (1 Spring), pp. 98-101

Dasgupta, P. and Mäler, K.G. (2000) 'Net national product, wealth, and social well-being' *Environment and Development Economics*, 5 (1), pp. 69-63

De Grauwe, P. (2002) 'Challenges for Monetary Policy in Euroland', *Journal of Common Market Studies*, 40 (4), pp.693-718

De Goyler, M. (2003) 'The Stability of Division', *South China Standard*, July 30th .

Deutsch, K. (1966) *Nationalism and Social Communication*, 2nd edition, Cambridge, Massachusetts: MIT Press

Deutsche Bundesbank (1999) '*Tietmeyer gegen kurzfristig orientierte Geldpolitik' Auszüge aus Presseartikeln'*, Frankfurt: Deutsche Bundesbank, 21 January, pp.3-4

Dicken, P. (1998) *Global Shift: Transforming the World Economy*, 3rd edition, New York: The Guilford Press

Dimitrakopolous, D. (2001) 'Incrementalism and Path Dependence: European Integration and Institutional Change in National Parliaments', *Journal of Common Market Studies*, 39 (3), pp.405-422

Dinan, D. (2005) *Ever Closer Union. Introduction to European Integration*, Basingstoke: Palgrave MacMillan

d'Iribarne, P. (1997) 'A check to enlightened capitalism' in Colin Crouch and Wolfgang Streeck (eds), *Political Economy of Modern Capitalism*, London: Sage (Chapter 9)

Dobb, M. (1946) [20ten] *Studies in the Development of Capitalism*, Montana US: Kessinger

Dore, R. (2000) *Stock Market Capitalism: Welfare Capitalism. Japan and Germany versus the Anglo-Saxons*, New York: Oxford University Press

Drucker, P. (1986) 'The changed world economy' in Peter Dicken, (ed), (1998) *Global Shift: transforming the world economy*, 3rd edition, New York: Guilford Press

Duisenberg, W.F. (2002a) '*The euro as a catalyst for European Integration'*, speech at the "One money, one Euregional market" conference, Maastricht, 6 February.

Duisenberg, W.F. (2002b) 'What are the political consequences of the euro?, paper presented at the Karlpreis-Europa-Forum, Aachen, 8 May.

Dumenil, G. and Levy, D. (2001) 'Costs and benefits of neoliberalism. A class analysis', *Review of International Political Economy*, 8 (4), pp.578-607

Dyson, K. (2000) *The Politics of the Euro-Zone. Stability or Breakdown?* New York: Oxford University Press

Dunkerly, D., Hodgson, D., Konopacki,S., Spybey,T., and Thompson ,A. (2002) *Changing Europe*, London: Routledge

ECB (2004) The monetary policy of the ECB. Frankfurt: ECB Publications

Economist, The (1994) *'The Global Economy: War of the Worlds'*, October 1st

Economist, The (1999), Millennium special edition, '*Wealth: the road to riches'*, December 31st, pp.10-12

Economist , *The* (2000) C*an the Kiwi economy fly?*, November 30th , pp.34-44

Economist, The (2001), '*China's economic power'*, March 10, p.26

Economist, The (2001) *'Scrap the stability pact'*, August 25t , p.13

Economist, The (2002) *'Capitalism and its troubles'*, May 18th, pp.3-28

Economist, The (2003) *'Co-ordinated kick-start?'* July 5th, p.39

Economist, The (2009) '*The nature of wealth'* October 10th, p.82

Economist, The (2010) '*Saving the euro' May* 18th, Special Briefing

Eichengreen, B., Wyplosz C., Bean, C., and Gerlach, S. (1998) 'The Stability Pact: More than a Minor Nuisance?', *Economic Policy*, 13 (26), pp. 65-113

Eiteman, D.K. (1998), *Multinational Business Finance*, New York: Addison-Wesley

Ellwood, W. (2001), *The No-Nonsense Guide to Globalisation*, London: New Internationalist

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*, (1997 reprint), Cambridge: Polity

Falkner, G. (2002) 'How intergovernmental are Intergovernmental Conferences? An example from the Maastricht Treaty reform' *Journal of European Public Policy*, 9 (1), pp. 98-119

Fearon, J.D. (1991) 'Counterfactuals and hypothesis testing in political science', *World Politics*, 43 (2), pp.169-195

Fioretos, O. (2001) 'The Domestic Sources of Multilateral Preferences: Varieties of Capitalism in the European Community', in Peter Hall and David Soskice (eds) *Varieties of Capitalism*, New York: Oxford University Press (Chapter 6)

Fishman, R.M. (1990) 'Rethinking State and Regime: Southern Europe's Transition to Democracy', *World Politics*, 42 (3), pp.422-440

Fitch, F. (1963) ‘A Logical Analysis of Some Value Concepts’ *Journal of Symbolic Logic,* 28 (2), pp.135-142

Foster, J.B. (2005) ‘The End of Rational Capitalism’, *Monthly Review,* 56 (10)

Frynas, J.G. (2003) ‘Global Monitor: Royal Dutch Shell’, *New Political Economy,*8 (2), pp.275-285

Galbraith, J.K. (1973) *Economics and the Public Purpose,* (1985 reprint), London: Penguin

Galbraith, J.K. (1991) *A history of economics*, London: Penguin

Galtung, J. (1971) 'A Structural Theory of Imperialism', *International Journal of Peace Research*, 8, pp.81-118

Garrett, G. (1992) ‘International co-operation and institutional choice: the European Community's internal market', *International Organisation*, 46 (2), pp.533-560

Garrett, G. (1998) *Partisan Politics in the Global Economy,* Cambridge: Cambridge University Press

Gerard, B. (1989) *Theory of the Capitalist Economy,* Oxford: Blackwell

Giddens, A. (1990) *The Consequences of Modernity,* Cambridge: Polity Press

Giddens, A. (1998) *The Third Way: The Renewal of Social Democracy,* Cambridge: Polity Press

Gill, S. (1998) ‘European governance and new institutionalism: Economic monetary union and alternatives’ *New Political Economy,* 3 (1), pp.5-22

Gill, S. (2000) 'Knowledge, Politics, and Neo- Liberal Political Economy' in Stubbs, R and Underhill, G.R.D (eds), *Political Economy and the Changing Global Order*, 2nd edition, Ontario: Oxford University Press

Goodwin, B. (2007) *Using Political Ideas,* Chichester: John Wiley & Sons

Goodwin, R.E. (2003) ‘Choose Your Capitalism’, *Comparative European Politics*, 1 (2), pp. 203-213

Gouldner, A.W. (1960) ‘ The Norm of Reciprocity: A Preliminary Statement’ *American Sociological Review*, 25 (2), pp.161-178

Grahl, J. and Teague, P. (1997) 'Is the European Social Model Fragmenting?', *New Political Economy,* 2 (2), pp. 405-26

Graziani, A. (1987) ‘Keynes’s finance motive, *Économies et Sociétiés* (Série Monnaie et Production,7), 24 (9), pp. 23-42

Graziani, A. (1990) 'The theory of the monetary circuit', *Économies et Sociétiés* (Série Monnaie et Production,7) 24 (6), pp.7-36

Graziani, A. (1996) 'Money as purchasing power and money as a stock of wealth in Keynesian economic thought', in G.Deleplace and E.F.Nell (eds) *Money in Motion: The Post-Keynesian and Circulation Approaches*, London and New York: Macmillan and St. Martin's Press, pp.139-154

Graziani, A. (1997) 'The Marxist theory of money', *International Journal of Political Economy*, 27(2), pp. 26-50

Gros, D. and Thygesen, N. (1998) *European Monetary Integration*, 2nd edition, Harlow: Pearson

Hacking, I. (1999) *The Social Construction of What*, Cambridge, MA: Harvard University Press

Hall, P. and Taylor, R. (1996) 'Political Science and the Three New Institutionalisms', *Political Studies*, 44 (5), pp. 936-957

Hall, P.A. (2001) 'The political economy of Europe in an era of interdependence', in Herbert Kitschelt *et al*, (eds), *Continuity and Change in Contemporary Capitalism*, Cambridge: Cambridge University Press

Hall, P.A. and Soskice, D. (2001) Introduction, in Peter Hall and David Soskice (eds) *Varieties of Capitalism*, New York: Oxford University Press (Chapter 1)

Hampden-Turner, C, and Trompenars, F (1994) *The Seven Cultures of Capitalism*, 2nd edition, London: Piatkus

Harvey, D. (20ten) *The Enigma of Capital*, London: Profile Books

Hay, C. (2000a) Contemporary capitalism, globalisation, regionalisation and the persistence of national variation, *Review of International Studies*, 26 (4), pp. 509-531

Hay, C. (2002a) *Political Analysis: a critical introduction*, Basingstoke: Palgrave

Hay, C. (2003a) '*What's Globalisation got To Do With It*? University of Birmingham Inaugural Lecture, 20th March

Hay, C. (2003b) 'Schumpeterian Post-National Workfare What? The State in, and the State of, State Theory Today' Paper presented at a roundtable discussion '*Putting Bob Jessop in His Place'* at the annual conference of the British International Studies Association, University of Birmingham, 15-17 December

Hay, C. (2004) 'Common trajectories, variable paces, divergent outcomes? Models of European capitalism under conditions of complex economic interdependence' *Review of International Political Economy*, 11 (2), pp. 231-262

Hay, C. (2202b) ‘Two Can Play At That game…Or Can They? Varieties of Capitalism, Varieties of Institutionalism’, paper presented at the conference on ‘The Convergence of Capitalist Economies’ at Wake Forest University, and the conference on ‘The Political Economy of Globalisation and European Integration’ at Warwick University both in September.

Hay, C. and Rosamond, B. (2002) Globalisation, European integration and the discursive construction of economic imperatives’, *Journal of European Public Policy*, 9 (2), pp. 147-167

Hay, C. and Smith, N.J. (2005) ‘Horses for Courses? The Political Discourse of Globalisation and European Integration in the UK and Ireland’, *West European Politics*, 28 (1), pp. 125-158

Hay, C., Smith, N., and Watson, M.G. (2006) ‘Beyond Prospective Accountancy: Reassessing the British Membership of the Single European Currency Comparatively’ *The British Journal of Politics and International Relations*, 8 (1), pp. 101-121

Heipertz, M. and Verdun, A. (2005) ‘The Stability and Growth Pact – Theorizing a Case in European Integration’, *Journal of Common Market Studies*, 43 (5), pp.985-1008

Heisenberg, D. and Richmond, A. (2002) ‘Supranational institution-building in the European Union: a comparison of the European Court of Justice and the European Central Bank’ *Journal of Economic Public Policy*, 9 (2), pp. 201-218

Held, D. (1995) *Democracy and the Global Order. From Modern State to Global Governance*, Stanford: Stanford University Press

Henderson, J. (1993) ‘The role of the state in the economic transformation of east Asia’, in C. Dixon and D. Drakakis-Smith (eds) *Growth Economies of Asia*, London: Routledge (Chapter 5)

Henderson, J. and Applebaum, R.P. (1992) ‘Situating the state in the east Asia development process’, in R.P. Applebaum and J. Henderson (eds) *States and Development in the Asian Pacific Rim*, London: Sage (Chapter 1)

Hendriksen, E.S. (1972) *Accounting Theory*, Illinois (US): Richard Irwin

Hernes, H. (1973) ‘The visible hand of the multinational corporation: A review’ *European Journal of Political Research*, 1, pp.265-292

Hettne, B. (1991) 'Europe and the Crisis: The Regionalist Scenario Revisited', in Marguerite Mendell and Daniel Salee (eds) *The Legacy of Karl Polanyi*, London: Palgrave Macmillan. (Chapter 8)

Hicks, J.R. (1939) *Value and Capital*, Oxford: Oxford University Press

Hill, B. (2001) *The European Union*, 4th edition, (Studies in Economics and Business), Oxford: Heinemann

Hirst, P and Thompson, G (1996) *Globalisation in Question*, Cambridge: Polity Press

Hirst, P. and Thompson, G. (1992) 'The problem of 'globalisation': international economic relations, national economic management and the formation of trading blocs', *Economy and Society*, 24, pp.408-42

Hollingsworth, J.R. and Boyer, R. (1997) 'Co-ordination of Economic Actors and Social Systems of Production', in J. Rogers Hollingsworth and Robert Boyer (eds.), *Contemporary Capitalism: The Embeddedness of Institutions*, Cambridge: Cambridge University Press (Chapter 1)

Honderich,T. (1995) *The Oxford Companion to Philosophy*, Oxford and New York: Oxford University Press

Hone, P. (1995) 'A Community of Europeans: The Requisite Underpinnings', *Journal of Common Market Studies*, 33 (1), pp.27-46

Hooghe, L. (1998) 'EU Cohesion Policy and Competing Models of European Capitalism' *Journal of Common Market Studies*, 36 (4), pp.457-477

Hooghe, L. and Marks, G. (1999) 'The making of a polity: the struggle over European Integration', in H Kitschelt, P. Lange, G Marks, and J.D Stephens (eds), *Continuity and Change in Contemporary Capitalism*, Cambridge: Cambridge University Press

Howe, P. (1995) 'A Community of Europeans: The Requisite Underpinnings', *Journal of Common Market Studies*, 33 (1), pp.27-46

Howell, C. (2003) 'Varieties of Capitalism: And Then There was One?', *Comparative Politics*, 36 (1), pp.13-24

http://csf.colorado.edu/wsystems/archive/papres/c-d&hal/isa99b/isa99b.htm. 21February 2001.

http://devdata.worldbank.org/external/CPProfile.asp?SelectedCountry=WLD&CCOD ten March 2002

http://www.imf.org/external/pubs/ft/seminar/1999/reforms/Naim.HTM. 25 February 2002.

Ingram, J.C. (1959) 'State and Regional Payments Mechanisms', *The Quarterly Journal of Economics*, 73 (4), pp. 619-632

Ishikawa, J. (1999) 'A critique of the Maastricht Road to European Monetary Union: Bringing Labour market Analysis Back In' Ph.D Thesis, London School of Economics and Political Science

Issing, O., Gaspar,V., Angeloni., I, and Tristani ,O. (2001) *Monetary Policy in the Euro Area: Strategy and Decision-Making at the European Central Bank*, Cambridge: Cambridge University Press

Jackson, M.O. and Morelli, M. (2011) in Christopher Coyne and Rachel Mathers (eds), *The Handbook on the Political Economy of War*, Cheltenham: Edward Elgar

Jenkins, D. (2004) 'Towards an EU supracapitalism? Path Dependency and National Preference Formation', *Journal of Economic Affairs*, 2 (3), pp.28-33

Jervis, R. (1998) 'Realism, Game Theory, and Co-operation, *World Politics*, 40 (3), pp. 317-349

Jessop, B. (1977) 'Recent theories of the capitalist state', *Cambridge Journal of Economics*, 1 (4), pp. 353-373

Johnson, C. (1982) 'The institutional foundations of Japanese industrial policy' *Californian Management Review*, Vol. XXVII, pp.59-69

Joll, J. (1990) *Europe since 1870*, 3rd edition, London: Penguin

Jones, E. (2003) 'Idiosyncrasy and integration: suggestions from comparative political economy' *Journal of European Public Policy*, ten(1), pp.140-158

Jones, E. (2003) 'Liberalized capital markets, state autonomy, and European monetary union' *European Journal of Political Research*, 42(3), pp.198-222

Jospin, L. (1999) *Modern Socialism*, London :Fabian Society

Kaplinsky, R. (2001), 'Is globalisation all it is cracked up to be?, *Review of International Political Economy*, 8:(1), pp.45-65

Kahn, R.F. (1958) 'Memorandum of evidence submitted to the Radcliffe committee'. Reprinted in R.F.Kahn (1972), *Selected Essays on Employment and Growth*, Cambridge: Cambridge University Press

Kaldor, N. (1958)'Monetary policy, economic stability, and growth', Memorandum submitted to the Committee on the Working of the Monetary System (Radcliffe Committee) June 23. Reprinted in N.Kaldor (1964), *Essays on Economic Policy*, New York: Norton, Vol 1, pp. 128-153

Kaldor, N. (1985) *Economics Without Equilibrium*, Armonk: M.E.Sharpe

Keohane, R. (1984) *After Hegemony: Co-operation and Discord in World Political Economy*, Princeton: Princeton University Press

Kay, A. (2003) 'Path dependency and the CAP', *Journal of European Public Policy*, 19 (3), pp.405-420

Keynes, J.M. (1930/1971) *A Treatise on Money* (vol.1 *The Pure Theory of Money*) London: Macmillan Reprinted in *The Collected Writings of John Maynard Keynes*, Vol.V, London and Basingstoke: Macmillan

King, G. (1988) 'Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model' American *Journal of Political Science*, 32(3), pp.838-863

King, G. (1989) 'Variance Specification in Event Count Models: From Restrictive Assumptions to a Generalised Estimator' *American Journal of Political Science*, 33(3), pp.762-784

Kitchelt, H., Lange, P., Marks. G., and Stephens, J.D. (1999) *Continuity and Change in Contemporary Capitalism*, Cambridge: Cambridge University Press

Korten, D.C. (1998) *'Life After Capitalism'*, paper presented at Edmonton, Calgary, and Saskatoon, Canada, November *http://iisd.ca/pcdf/1998/capitalsm.htm.*

Kratochwil, F. (1982) 'On the Notion of "Interest" in International Relations', *International Organisation*, 36 (1), pp.1-30

Kratochwil, F. and Ruggie, J.G. (1986) 'International Organisation: A State of the Art on an Art of the State', *International Organisation*, 40 (4), pp.753-775

Krugman, P. (1983) 'New Theories of Trade Among Industrial Countries', *The American Economic Review*, 73 (2), pp.343-347

Krugman, P. (1994) 'Competitiveness: A Dangerous Obsession. Foreign Affairs, (March/April), pp.28-44

Lavelle, K.C. (1999) 'International financial institutions and emerging capital markets in Africa', *Review of International Political Economy*, 6 (2), pp.20-224

Leonard, R. (2002) *The Economist guide to the European Union*, 8th edition, London: Profile Books

Lijphart, A. (1971) 'Comparative Politics and the Comparative Method' *American Political Science Review*, 65, pp. 682-693

Lippit, V. (2005) *Capitalism*, Abingdon: Routeledge

Llewellyn, D.T. (1992) ' Banking and financial services' in Dennis Swann (ed), *The Single European Market and Beyond*, London: Routledge (Chapter 5)

Lowndes, V. (2002) 'Institutionalism' in David Marsh and Gerry Stoker (eds), *Theory and Methods in Political Science*, 2nd edition, Basingstoke: Palgrave (Chapter 4)

Mansfield, E.D. (1995) 'International institutions and economic sanctions' *World Politics*, 47 (2), pp.575-605

March, J. and Olsen, J. (1989) *Rediscovering Institutions: The Organizational Basis of Politics*, New York: Free Press

Marcussen, M. (1998)' Ideas and Elites: Danish Macro-Economic Policy Discourse in the EMU Process' Ph.D thesis, Demark: Alborg University in Dyson, K. (2000) *The Politics of the Euro-Zone. Stability or Breakdown?* New York: Oxford University Press

Marsh, D. and Stoker, G. (2002) 'Introduction' in David Marsh and Gerry Stoker (eds), *Theory and Methods in Political Science*, 2nd edition, Basingstoke: Palgrave.

Martin, L. (1992) 'Interests, power, and multilateralism', *International Organisation*, 46 (4), pp.765-792

Mattila, M. (2004) 'Contested decisions: Empirical analysis of voting in the European Union Council of Ministers' *European Journal of Political Research*, 43(1), pp.51-82

Meiksins-Wood, E. (1999) *The Origin of Capitalism*, London: Verso

Meiksins-Wood, E. (1991) *The Pristine Culture of Capitalism* London: Verso

Mendell, M. and Salee, D. (1991) 'Introduction' in Marguerite Mendell and Daniel Salee (eds), *The Legacy of Karl Polanyi*, London: Palgrave Macmillan

Mercer, J. (1995) 'Anarchy and identity', *International Organization*, 49, pp 229-252

Milner, H. (1992) 'International Theories of Co-operation Among Nations: Strengths and Weaknesses', *World Politics*, 44 (3), pp.466-496.

Molle, W. (1990) *The Economics of European Integration* (Theory, Practice, Policy), Aldershot: Dartmouth

Moore, B.J. (1988) *Horizontalists and Verticalists: The Macroeconomics of Credit Money*, Cambridge: Cambridge University Press

Moraravcsik, A. (1991) 'Negotiating the Single European Act: national interests and conventional statecraft in the European Community', *International Organisation*, 45 (1), pp.19-56.

Moravcsik, A. (1993) 'Preferences and Power in the European Community: A Liberal Intergovernmentalist Approach' *Journal of Common Market Studies*, 31 (4), pp. 473-524.

Moravcsik, A. (1995) ' Liberal Intergovernmentalism and Integration: A Rejoinder', *Journal of Common Market Studies*, 33 (4)

Moraravcsik, A. (1997) 'Taking Preferences Seriously: A Liberal Theory of International Politics' *International Organisation*, 51 (4), pp.513-553

Moraravcsik, A. (1998) *The Choice for Europe: Social Purpose and State Power from Messina to Maastricht*, Ithaca: Cornell University Press

Moraravcsik,A. (1999) ' A New Statecraft? Supranational Entrepreneurs and International Co-operation', *International Organisation*, 53 (2), pp. 267-306

Munday, S. (2000) *Markets and Market Failure*, Oxford: Heinemann

Naim, M. (1999) 'Fads and fashion in Economic Reforms: Washington Consensus or Washington Confusion?', *Foreign Policy Magazine*, October 26, pp.1-22

Neal, L and Barbezat, D (1998) *The Economics of the European Union and the Economies of Europe*, New York: Oxford University Press

Nelson, B.F. and Stubb, A.C-G. (1998) *The European Union*, *Readings on the Theory and Practice of European Integration*, 2nd edition, Basingstoke: MacMillan.

Nye,J. (1989) 'Neorealism and Neoliberalism', *World Politics*, 42 (1), pp.235-251.

OECD, The (1999) *Economic Outlook*, Paris: OECD

Ohmae,K. (1985) *Triad Power: The Coming Shape of Global Competition*, Free Press: New York.

Ohmae,K. (1990) *The Borderless World: Power, Strategy and the Interlinked Economy*, Free Press:New York.

Osborne, M.J. (2004) *An introduction to Game Theory*, Oxford University Press: New York.

Padoan, P.C. and Mariani, F. (2006) ' Growth and Finance, European Integration and the Lisbon Strategy' *The Journal of Common Market Studies*, 44 (1), pp.77-112

Peters, G. (1999) *Institutional Theory in Political Science: The New Institutionalism*, London: Pinter

Pierson, P. (1996) 'The Path to European Integration: A Historical Institutionalism Analysis', *Comparative Political Studies*, 29 (2), pp. 123-163

Polanyi, K. (1957) *The Great Transformation*, (First paperback edition), Boston: Beacon

Pontusson, J (1995) 'Explaining the Decline of European Social Democracy. The Role of Structural and Economic Change', *World Politics*, 47 (2), pp.495-533

Quimbo, N.T. (2007) 'Trapo Parties and Corruption', *Kasama, 21* (1)

Radaelli, C. (1999) *Technocracy in the European Union*, London: Pearson Education

Radice, H. (2000) 'Globalisation and national capitalisms: theorising convergence and differentiation.' *Review of International Political Economy*, 7:4 Winter, pp.719-742

Realfonzo, R. (1998) Money and Banking: Theory and Debate (1900-1940), Cheltenham and Northampton: Edward Elgar Publishing.

Reich, R.B. (1991), 'The Work of Nations' in Peter Dicken, (1998) *Global Shift: transforming the world economy*, 3rd edition, New York: Guilford Press

Reich, R.B. (1991*) The Work of Nations*, New York: Alfred. A. Knopf

Reiter, J. (2003) 'Changing the Microfoundations of Corporatism: The Impact of Financial Globalisation on Swedish Corporate Ownership' *New Political Economy*, 8 (1), pp.ten3-125

Reus-Smit, C. (2009) 'Constructivism' in S. Burchill *et al*. (eds) *Theories of International Relations*, 4th edition, Hampshire: Palgrave MacMillan

Rhodes, M. (1997)'Globalisation, Labour Markets, and Welfare States: A Future of "Competitive Corporatism?"', in Martin Rhodes and Yves Meny (eds), *The Future of European Welfare*, London: Macmillan

Risa,C. (1996) 'The use of mathematics in political science: A survey of European and American Journals' *European Journal of Political Research*, 29, pp.477-508

Risse, T. (1999) 'Contribution to ECSA Review Forum on Approaches to the Study of European politics' *ECSA Review* 12 (2), pp. 6-7

Robinson, J. *(1956) The Accumulation of Capital*, London: Macmillan

Rochon, L-P. (2001) 'Cambridge's contribution to endogenous money: Robinson and Kahn on credit and money', *Review of Political Economy*, 13(3), pp.287-307

Rochon, L-P. and Rossi, S., eds (2003*) Modern Theories of Money. The nature and Role of Money in Capitalist Economies*, Cheltenham (UK): Edward Elgar Publishing

Rogoff, K. (2001) 'Why Not a Global Currency' *The American Economic Review*, 91 (2), pp.243-247

Rokowski, G. (2002) 'Methods for Researching the Social Production of Labour in Capitalism' (unpublished manuscript), University of Northampton Research Seminar, March 7th.

Rosamond, B. (2002) 'Imagining the European Economy: 'Competitiveness' and the Social Construction of 'Europe' as an Economic Space', *New Political Economy*, 7 (2), pp. 157-17

Rosamond, B. (2000) *Theories of European Integration*, Basingstoke: Palgrave

Rosamond, B. (2005) '*The social construction of 'the European Economy': discourses of supranational macroeconomic space since 1957'* (unpublished manuscript), Paper presented at the BISA annual conference St. Andrews, December 2005.

Ross, S.A. (1973) 'The Economic Theory of Agency: The Principal's Problem' *The American Economic Review*, 63 (2), pp.134-139

Rostow, W.W. (1961) *The Stages of Economic Growth*, London: Cambridge University Press

Ruigrok, W. (2000) 'International Corporate Strategies and Restructuring' in Richard Stubbs and Geoffrey Underhill (eds) *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press (Chapter 26)

Russett, B.M. (1968) ' Delineating International Regions' in J. David Singer (ed) *Quantitative International Politics: Insights and Evidence*, New York: Free Press

Sabine, G.H. (1963) *A History of Political Theory*, 3rd edition, London: Harrap.

Sachs, S.E. (2000) 'The Prohibition of Usury, and its Evasion in the Commercial Revolution. http://www.stevesachs.com/papers/paper-rsf.html

Sandholtz,W. and Zysman, J. (1989) 'Recasting the European Bargain', *World Politics*, 42 (1), pp.95-128

Saudagaran, S.M. (1998), 'An Empirical Study of Selected Factors Influencing the Decisions to List on Foreign Stock Exchanges', *Journal of International Business Studies*, Spring, pp.ten1-ten8

Sawyer, M.C. (1989) *The Challenge of Radical Political Economy. An Introduction to the Alternatives to Neo-Classical Economics*, Hemel Hempstead: Harvester Wheatsheaf

Scharpf, F. (1997) ' Introduction: the problem-solving capacity of multi-level governance', *Journal of European Public Policy*, 4 (4), pp.520-538

Scharpf, F. (2002) 'Legitimate Diversity: The New Challenge of European Integration', *Cahiers Europèens de Sciences Politique*, (1), pp. 1-42

Schelkle, W. ((2005) ' The Political Economy of Fiscal Policy Co-ordination in EMU: From Disciplinarian Device to Insurance Arrangement', *Journal of Common Market Studies*, 43 (2), pp.371-391

Scheller, H. K, (2004) *The European Central Bank – History, Role and Functions*, Frankfurt: European Central Bank

Schmidt,V.A. (2002) *The Futures of European Capitalism*, New York: Oxford University Press

Schmitt, B. (1986) 'The process of formation of economics in relation to other sciences', in M.Barazini and R. Scazzieri (eds), *Foundations of Economics: Structures of Inquiry and Economic Theory*, Oxford and New York: Basil Blackwell and St. Martin's Press

Schmitter, P. (1996) 'Some Alternative Futures for the European Polity and Their Implications for European Public Policy', in Meny *et al. (eds) Adjusting to Europe: The Impact of the European Union on National Institutions and Policies*, Routledge: London,

Scott, J. (1997) *Corporate Business and Capitalist Classes*, New York: Oxford University Press

Shonfield, A. (1965) *Modern Capitalism*, London: Oxford University Press.

Skach, C. (2005) ' We, the Peoples? Constitutionalising the European Union' *Journal of Common Market Studies*, 43 (1), pp.149-170
Skocpol, T. (1979) *States and social revolutions*, Cambridge; Cambridge University Press

Sloman, J. (2000) *Economics*, 4th edition, London: Prentice Hall

Sloman, J. (2003) *Economics*, 5th edition, London: Prentice Hall

Smith, M. (2000) 'Negotiating Globalisation: The Foreign Policy of the European Union', in Richard Stubbs and Geoffrey Underhill (eds), *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press (Chapter 27)

Smith, A. (1776) *The Wealth of Nations*, (1983 reprint), London: Penguin

Smith, A. (1986) *The Ethnic Origins of Nations*, Oxford: Blackwell

Smith, A. (1988) 'The Myth of the "Modern Nation" and the Myth of Nations' *Ethnic and Radical Studies*, 11 (January), pp.1-26

Smith, A. (1992) 'National Identity and the Idea of European Unity', *International Affairs*, 68 (January,) pp.55-76

Smith, N. (2002) 'The Irish Republic - 'A Showpiece of Globalisation?', *Politics*, 22 (3), pp. 125-134

Snidal, D. (1985) 'Game Theory of International politics' *World Politics*, 38 (1), pp. 25-57

Stone-Sweet, A. and Sandholtz, W. (1997) ' European integration and supranational governance' *Journal of European Public Policy*, 4 (3), pp.297-317

Stopford, J and Strange, S. (1991) *Rival States, Rival Firms*, Cambridge: Cambridge University Press

Story, J. (2000) 'The Emerging World Financial Order and Different Forms of Capitalism' in Stubbs, R. and Underhill, G.R.D. eds, *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press

Strange, S. (1997) 'The future of global capitalism; or, will divergence persist forever?' in Colin Crouch and Wolfgang Streeck (eds), *Political Economy of Modern Capitalism*, London: Sage (Chapter 11)

Strange, S. (1998) ' Who are EU? Ambiguities in the Concept of Competitiveness' *Journal of Common Market Studies*, 36 (1), pp.101-114

Strange, S. (2000) 'World Order, Non-State Actors, and the Global Casino: The Retreat of the State?' in Richard Stubbs and Geoffrey Underhill, eds., *Political Economy and the Changing World Order*, 2nd edition, Ontario: Oxford University Press

Stubbs, R. and Underhill, G.R.D. eds., (2000) *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press

Sverdrup, U. (2002) 'An institutional perspective on treaty reform: contextualising the Amsterdam and Nice Treaties' *Journal of European Public Policy*, 9 (2), pp. 120-140

Swann, D. (1992) 'The single market and beyond - an overview', in Dennis Swann (ed) *The Single European Market and Beyond*, London: Routledge (Chapter 1)

Tawney, R.H. (1938) *Religion and the Rise of Capitalism*, Harmondsworth: Penguin.

Thomson, R., Jovanka, B., and Stokman, F. (2004) 'Actor alignments in European union decision making', *European Journal of Political Research*, 43, pp.237-261

Titmuss, R. (1958) *Essays on 'The Welfare State'*, London: George Allen & Unwin

Townsend, M. (2007) *The Euro & Economic and Monetary Union*, London: John Harper

Trechsel, A.H. (2006), (ed) *Towards a Federal Europe?* New York: Routledge.

Tsebelis, G. (1999) 'Contribution to the ECSA Review Forum on Approaches to the Study of European Politics', *ECSA Review*, 12 (2), pp. 4-6

Tsoukalis, L. (2006) The JCMS Annual lecture 'Managing Diversity and Change in the EU' *Journal of Common Market Studies*, 44 (1), pp.1-15

Underhill, G.R.D. (2000) 'Introduction: Conceptualising the Changing Global Order', in Richard Stubbs and Geoffrey Underhill (eds) *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press

Vitols, S. (2000) Globalisation: A Fundamental Challenge to the German Model?, in Richard Stubbs and Richard Underhill (eds) *Political Economy and the Changing Global Order*, 2nd edition, Toronto: Oxford University Press (Chapter 31)

von Krosigk, F. (1969) 'A Reconsideration of Federalism in the Scope of the Present Discussion on European Integration' *Journal of Common Market Studies*, 9 (4), pp.197-223.

Vrousalis, N. (2006) 'The Strains of Commitment: A Federal System Needs a Common Fiscal Policy', *European Integration*, 28 (2) pp.181-192

Wagner, R.H. (1983) 'The Theory of Games and the Problem of International Co-operation', *American Political Science Review*, 77 (2), pp.330-346

Waldenberger, F. (2002) 'Understanding 'Marketisation' and 'Financialisation', *New Political Economy*, 7 (1), pp. 125-127

Walker, G.R. and Fox, M.A. (1996) Globalisation: An Analytical Framework, *Indiana Journal of Global Legal Studies*, 3:2 Spring, pp.1-40.

Watson, M. (2003) 'Constructing and Contesting Orthodoxies: General Equilibrium Economics and the Political Discourse of Globalisation', paper presented at the Annual Conference of the International Studies Association, Portland, Oregon, 28th February

Watson, M. (2004) 'The Rhetorical Basis of the Market Economy: Schumpeter, Smith and Walras on the Co-ordination Problem', paper presented at the General Seminar Programme, University of Sheffield, 11th March

Watson, M. (2005) *Foundations of International Political Economy*, Basingstoke: Palgrave MacMillan.

Webb, M.C. (2000) 'The Group of Seven and Political Management of the Global Economy' in Richard Stubbs and Geoffrey Underhill, eds., *Political Economy and the Changing Global Order*,2nd edition, Toronto: Oxford University Press

Weiss, L. (1998) *The Myth of the Powerless State*, Cambridge: Polity.

Wendt, A. (1999) *Social Theory of International Politics*, Cambridge: Cambridge University Press

Westaway, T. (1992) ' The fiscal dimension of 1992' in Dennis Swann (ed), *The Single European Market and Beyond*, London: Routledge (Chapter 4)

Wildavsky, A. (1987) 'Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation', *American Political Science Review*, 81 (1), pp.3-22

Wilkinson, R.G. (1973), *Poverty and Progress*, London: Methuen

Zysman, J. (1996) The Myth of a "Global" Economy: Enduring National and Emerging Regional Realities, *New Political Economy*, 1 (2), pp.157-184

Appendices

Appendix 1

Minitab statistical outputs for EU economic growth 1986-2006 (tests 1-13)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E-BE)	104	5.59	3.05	0.30
CME (E-AE)	64	4.49	2.51	0.31

Difference = mu (CME (E-BE)) - mu (CME (E-AE))
Estimate for difference: 1.ten0
95percent CI for difference: (0.244, 1.956)
T-Test of difference = 0 (vs not =): T-Value = 2.54 P-Value = 0.012 DF = 152

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME (NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

	N	Mean	StDev	SE Mean
CME (NE-BE)	26	5.47	2.86	0.56
CME (NE-AE)	16	4.46	1.38	0.34

Difference = mu (CME(NE-BE)) - mu (CME (NE-AE))
Estimate for difference: 1.007
95percent CI for difference: (-0.325, 2.339)
T-Test of difference = 0 (vs not =): T-Value = 1.53 P-Value = 0.134 DF = 38

3. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
LME (E-BE)	13	9.25	3.74	1.0
LME (E-AE)	8	10.55	3.47	1.2

Difference = mu (LME(E-BE)) - mu (LME(E-AE))
Estimate for difference: -1.30
95percent CI for difference: (-4.72, 2.13)
T-Test of difference = 0 (vs not =): T-Value = -0.81 P-Value = 0.433 DF = 15

4. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere pre and post-euro. [LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code)]

	N	Mean	StDev	SE Mean
LME (NE-BE)	13	7.08	2.28	0.63
LME (NE-AE)	8	5.225	0.590	0.21

Difference = mu (LME(NE-BE)) - mu (LME(NE-AE))
Estimate for difference: 1.860
95percent CI for difference: (0.433, 3.286)
T-Test of difference = 0 (vs not =): T-Value = 2.80 P-Value = 0.014 DF = 14

5. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre-euro [(LME (E-BE) compared to Liberal Market Economies outside the Eurosphere pre-euro. (LME (NE-BE) (groups e & g in key code)]

	N	Mean	StDev	SE Mean
LME (E-BE)	13	9.25	3.74	1.0
LME (NE-BE)	13	7.08	2.28	0.63

Difference = mu (LME(E-BE)) - mu (LME(NE-BE))
Estimate for difference: 2.17
95percent CI for difference: (-0.37, 4.71)
T-Test of difference = 0 (vs not =): T-Value = 1.79 P-Value = 0.090 DF = 19

6. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere post-euro. [(LME (E-BE) compared to Liberal Market Economies outside the Eurosphere post-euro (LME (NE-BE) (groups f & h in key code)]

	N	Mean	StDev	SE Mean
LME (E-AE)	8	10.55	3.47	1.2
LME (NE-AE)	8	5.225	0.590	0.21

Difference = mu (LME(E-AE)) - mu (LME(NE-AE))
Estimate for difference: 5.33
95percent CI for difference: (2.38, 8.27)
T-Test of difference = 0 (vs not =): T-Value = 4.28 P-Value = 0.004DF = 7

7. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro. [SEE (E-BE) compared to SEE (E-AE) (groups I & j in key code)]

	N	Mean	StDev	SE Mean
SEE (E-BE)	39	12.43	5.48	0.88
SEE (E-AE)	24	7.16	2.28	0.47

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: 5.275
95percent CI for difference: (3.284, 7.266)
T-Test of difference = 0 (vs not =): T-Value = 5.31 P-Value = 0.000 DF = 55

8. Two-sample T-Test and Confidence Intervals for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

	N	Mean	StDev	SE Mean
FEB (NE-BE)	34	43.3	80.7	14
FEB (NE-AE)	24	8.17	3.32	0.68

Difference = mu (FEB(NE-BE)) - mu (FEB(NE-AE))
Estimate for difference: 35.1
95percent CI for difference: (6.9, 63.3)
T-Test of difference = 0 (vs not =): T-Value = 2.53 P-Value = 0.016 DF = 33

9. Two-sample T-Test and Confidence Intervals for Small Island Economies outside the Eurosphere pre and post-euro. [(SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

	N	Mean	StDev	SE Mean
SIE (E-BE)	26	8.83	3.09	0.61
SIE (E-AE)	16	5.82	2.39	0.60

Difference = mu (SIE (E-BE)) - mu (SIE(E-AE))
Estimate for difference: 3.006
95percent CI for difference: (1.281, 4.730)
T-Test of difference = 0 (vs not =): T-Value = 3.53 P-Value = 0.001 DF = 37

10. Two-sample T-Test and Confidence Intervals for Baltic Country Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

Two-sample T for BCE(E-BE) vs BCE(E-AE)

	N	Mean	StDev	SE Mean
BCE (E-BE)	21	111	194	42
BCE (E-AE)	24	11.59	5.70	1.2

Difference = mu (BCE(E-BE)) - mu (BCE(E-AE))
Estimate for difference: 99.5
95percent CI for difference: (11.0, 188.0)
T-Test of difference = 0 (vs not =): T-Value = 2.35 P-Value = 0.029 DF = 20

11. One-way ANOVA for All Country Economies within the Eurosphere pre and post –euro. [ALL (E-BE) compared to ALL (E-AE) (groups q & r in key code)]

```
Source   DF     SS     MS     F      P
Factor    1    224.7  224.7  12.30  0.001
Error   250   4568.0   18.3
Total   251   4792.7

S = 4.275   R-Sq = 4.69percent   R-Sq(adj) = 4.31percent


                    Individual 95percent CIs For Mean Based on
                    Pooled StDev
Level           N   Mean  StDev  --+---------+---------+---------+-------
ALL (EBE)  156  7.606  4.843                  (------*------)
ALL (EAE)   96  5.661  3.134  (--------*-------)
                  --+---------+---------+---------+-------
                  5.0       6.0       7.0       8.0

Pooled StDev = 4.275
```

12. One-way ANOVA for All Country Economies within the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) post-euro (groups s & t in key code)]

```
Source   DF      SS     MS     F     P
Factor    1    39358  39358  7.07  0.008
Error   206  1147208   5569
Total   207  1186566

S = 74.63   R-Sq = 3.32percent   R-Sq(adj) = 2.85percent


                    Individual 95percent CIs For Mean Based on
                    Pooled StDev
Level           N   Mean  StDev  -----+---------+---------+---------+----
ALL (NEBE)  120  35.58  98.11                 (--------*--------)
ALL (NEAE)   88   7.74   4.50  (---------*----------)
                  -----+---------+---------+---------+----
                     0        15        30        45

Pooled StDev = 74.63
```

13. One-way ANOVA for All Country Economies pre and post-euro. [ALL (E-AE) compared to ALL (NE-AE) (groups u & v in key code)]

Source	DF	SS	MS	F	P
Factor	1	18988	18988	7.22	0.007
Error	458	1205045	2631		
Total	459	1224033			

S = 51.29 R-Sq = 1.55percent R-Sq(adj) = 1.34percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	-+---------+---------+---------+--------
ALLBE	276	19.77	66.12	(-------*--------)
ALLAE	184	6.65	3.97	(----------*---------)
				-+---------+---------+---------+--------
				0.0 7.0 14.0 21.0

Pooled StDev = 51.29

Appendix 2

Minitab statistical outputs for EU economic growth per head of population 1986-2006 (tests 1-13)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E-BE)	104	119.7	29.7	2.9
CME (E-AE)	64	122.0	41.3	5.2

Difference = mu (CME(E-BE)) - mu (CME (E-AE))
Estimate for difference: -2.30
95percent CI for difference: (-14.04, 9.44)
T-Test of difference = 0 (vs not =): T-Value = -0.39 P-Value = 0.699 DF = 103

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [(CME (NE-BE))compared to (CME (NE-AE) (groups c & d in key code)]

Two-sample T for CME(NE-BE) vs CME(NE-AE)

	N	Mean	StDev	SE Mean
CME (NE-BE)	26	137.54	9.81	1.9
CME (NE-AE)	16	131.3	11.0	2.7

Difference = mu (CME (NE-BE)) - mu (CME(NE-AE))
Estimate for difference: 6.20
95percent CI for difference: (-0.65, 13.04)
T-Test of difference = 0 (vs not =): T-Value = 1.85 P-Value = 0.074 DF = 29

3. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere (CME (E-BE)) and Co-ordinated Market Economies outside the Eurosphere [(CME (NE-BE), both pre-euro (groups b & d in key code)]

Two-sample T for CME (E-BE) vs CME (NE-BE)

	N	Mean	StDev	SE Mean
CME (E-BE)	104	119.7	29.7	2.9
CME (NE-BE)	26	137.54	9.81	1.9

Difference = mu (CME (E-BE)) - mu (CME (NE-BE))
Estimate for difference: -17.82
95percent CI for difference: (-24.73, -ten.92)
T-Test of difference = 0 (vs not =): T-Value = -5.11 P-Value = 0.000 DF = 118

4. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

Two-sample T for LME(E-BE) vs LME(E-AE)

	N	Mean	StDev	SE Mean
LME (E-BE)	13	76.4	12.1	3.3
LME (E-AE)	8	133.5	13.2	4.7

Difference = mu (LME(E-BE)) - mu (LME(E-AE))
Estimate for difference: -57.12
95percent CI for difference: (-69.50, -44.74)
T-Test of difference = 0 (vs not =): T-Value = -9.97 P-Value = 0.000 DF = 13

5. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere pre and post-euro. [LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code)]

Two-sample T for LME(NE-BE) vs LME(NE-AE)

	N	Mean	StDev	SE Mean
LME (NE-BE)	13	90.48	6.68	1.9
LME (NE-AE)	8	112.68	2.58	0.91

Difference = mu (LME (NE-BE)) - mu (LME (NE-AE))
Estimate for difference: -22.20
95percent CI for difference: (-26.58, -17.82)
T-Test of difference = 0 (vs not =): T-Value = -ten.75 P-Value = 0.000 DF = 16

6. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere post-euro. [(LME (NE-AE)) compared to Liberal Market Economies within the Eurosphere post-euro (LME (E-AE (groups f & h in key code)]

Two-sample T for LME (NE-AE) vs LME (E-AE)

	N	Mean	StDev	SE Mean
LME (NE-AE)	8	112.68	2.58	0.91
LME (E-AE)	8	133.5	13.2	4.7

Difference = mu (LME(NE-AE)) - mu (LME(E-AE))
Estimate for difference: -20.82
95percent CI for difference: (-32.04, -9.61)
T-Test of difference = 0 (vs not =): T-Value = -4.39 P-Value = 0.003 DF = 7

7. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro. [SEE (E-BE) compared to SEE (E-AE) (groups I & j in key code)]

Two-sample T for SEE(E-BE) vs SEE(E-AE)

	N	Mean	StDev	SE Mean
SEE (E-BE)	41	52.2	10.4	1.6
SEE (E-AE)	22	62.99	9.74	2.1

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: -ten.74
95percent CI for difference: (-16.05, -5.43)
T-Test of difference = 0 (vs not =): T-Value = -4.08 P-Value = 0.000 DF = 45

8. Two-sample T-Test and Confidence Intervals for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

Two-sample T for FEB(NE-BE) vs FEB(NE-AE)

	N	Mean	StDev	SE Mean
FEB (NE-BE)	35	15.83	5.41	0.91
FEB (NE-AE)	24	27.13	5.73	1.2

Difference = mu (FEB(NE-BE)) - mu (FEB(NE-AE))
Estimate for difference: -11.30
95percent CI for difference: (-14.29, -8.32)
T-Test of difference = 0 (vs not =): T-Value = -7.62 P-Value = 0.000 DF = 47

9. Two-sample T-Test and Confidence Intervals for Small Island Economies outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

Two-sample T for SIE(E-AE) vs SIE(E-BE)

	N	Mean	StDev	SE Mean
SIE (E-AE)	6	55.6	12.8	5.2
SIE (E-BE)	36	48.3	10.1	1.7

Difference = mu (SIE(E-AE)) - mu (SIE(E-BE))
Estimate for difference: 7.21
95percent CI for difference: (-6.21, 20.62)
T-Test of difference = 0 (vs not =): T-Value = 1.31 P-Value = 0.237 DF = 6

10. Two-sample T-Test and Confidence Intervals for Baltic Country Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

Two-sample T for BCE (E-BE) vs BCE (E-AE)

	N	Mean	StDev	SE Mean
BCE (E-BE)	20	9.27	4.29	0.96
BCE (E-AE)	24	20.67	5.52	1.1

Difference = mu (BCE(E-BE)) - mu (BCE(E-AE))
Estimate for difference: -11.40
95percent CI for difference: (-14.39, -8.41)
T-Test of difference = 0 (vs not =): T-Value = -7.70 P-Value = 0.000 DF = 41

11. Two-sample T-Test and Confidence Intervals for all economies within the Eurosphere pre and post-euro. [ALL (E-BE) compared to ALL (E-AE) (groups q & r in key code)]

Two-sample T for ALL (E-BE) vs ALL (E-AE)

	N	Mean	StDev	SE Mean
ALL (E-BE)	215	86.2	40.9	2.8
ALL (E-AE)	100	10.6	43.8	4.4

Difference = mu (ALL (E-BE)) - mu (ALL (E-AE))
Estimate for difference: -19.78
95percent CI for difference: (-30.02, -9.54)
T-Test of difference = 0 (vs not =): T-Value = -3.81 P-Value = 0.000 DF = 181

12. Two-sample T-Test and Confidence Intervals for all economies outside the Eurosphere pre and post-euro [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

Two-sample T for ALL(NE-AE) vs ALL(NE-BE)

	N	Mean	StDev	SE Mean
ALL (NE-AE)	72	57.6	48.9	5.8
ALL (NE-BE)	129	47.6	51.4	4.5

Difference = mu (ALL (NE-AE)) - mu (ALL (NE-BE))
Estimate for difference: ten.04
95percent CI for difference: (-4.43, 24.51)
T-Test of difference = 0 (vs not =): T-Value = 1.37 P-Value = 0.172 DF = 15

13. One-way ANOVA for All Country Economies pre and post-euro. [ALL (E-AE) compared to ALL (NE-AE) (groups u & v in key code)]

Source DF SS MS F P
Factor 1 67688 67688 29.20 0.000
Error 498 1154322 2318
Total 499 1222009

S = 48.14 R-Sq = 5.54percent R-Sq(adj) = 5.35percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level N Mean StDev ---+---------+---------+---------+------
ALL (BE) 344 71.71 48.75 (----*----)
ALL (AE) 156 96.83 46.78 (-------*------)
---+---------+---------+---------+------
70 80 90 ten0

Pooled StDev = 48.14

Appendix 3

Minitab statistical outputs for EU productivity 1986-2006 (tests 1-13)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E-BE)	104	2.06	1.43	0.14
CME (E-AE)	64	1.34	1.10	0.14

Difference = mu (CME (E-BE)) - mu (CME (E-AE))
Estimate for difference: 0.723
95percent CI for difference: (0.334, 1.111)
T-Test of difference = 0 (vs not =): T-Value = 3.68 P-Value = 0.000 DF = 157

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME (NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

Two-sample T for CME(NE-BE) vs CME(NE-AE)

	N	Mean	StDev	SE Mean
CME (NE-BE)	26	2.01	1.22	0.24
CME (NE-AE)	16	1.86	1.26	0.32

Difference = mu (CME (NE-BE)) - mu (CME (NE-AE))
Estimate for difference: 0.155
95percent CI for difference: (-0.653, 0.964)
T-Test of difference = 0 (vs not =): T-Value = 0.39 P-Value = 0.

3. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
LME (E-BE)	13	3.28	2.23	0.62
LME (E-AE)	8	2.71	1.44	0.51

Difference = mu (LME(E-BE)) - mu (LME(E-AE))
Estimate for difference: 0.572
95percent CI for difference: (-1.112, 2.256)
T-Test of difference = 0 (vs not =): T-Value = 0.71 P-Value = 0.485 DF = 18

4. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere pre and post-euro. [LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code)]

	N	Mean	StDev	SE Mean
LME (NE-BE)	13	1.87	1.16	0.32
LME (NE-AE)	8	1.750	0.532	0.19

Difference = mu (LME(NE-BE)) - mu (LME(NE-AE))
Estimate for difference: 0.119
95percent CI for difference: (-0.663, 0.901)
T-Test of difference = 0 (vs not =): T-Value = 0.32 P-Value = 0.752 DF = 18

5. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro. [SEEE (E-BE) compared to SEE (EE-AE) (groups I & j in key code)]

	N	Mean	StDev	SE Mean
SEE (E-BE)	42	1.99	2.21	0.34
SEE (E-AE)	21	1.08	1.09	0.24

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: 0.907
95percent CI for difference: (0.077, 1.737)
T-Test of difference = 0 (vs not =): T-Value = 2.19 P-Value = 0.033 DF = 6

6. Two-sample T-Test and Confidence Intervals for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

	N	Mean	StDev	SE Mean
FEB (NE-BE)	19	2.82	4.32	0.99
FEB (NE-AE)	24	3.97	1.79	0.37

Difference = mu (FEB(NE-BE)) - mu (FEB(NE-AE))
Estimate for difference: -1.15
95percent CI for difference: (-3.35, 1.04)
T-Test of difference = 0 (vs not =): T-Value = -1.09 P-Value = 0.287 DF = 22

7. Two-sample T-Test and Confidence Intervals for Small Island Economies (SIEs) outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

	N	Mean	StDev	SE Mean
SIE (NE-BE)	10	3.20	1.25	0.39
SIE (NE-AE)	16	1.13	2.12	0.53

Difference = mu (SIE(NE-BE)) - mu (SIE(NE-AE))
Estimate for difference: 2.075
95percent CI for difference: (0.710, 3.440)
T-Test of difference = 0 (vs not =): T-Value = 3.14 P-Value = 0.005 DF = 23

8. Two-sample T-Test and Confidence Intervals for Baltic Country Economies (BCEs) outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

	N	Mean	StDev	SE Mean
BCE (NE-BE)	20	1.5	11.0	2.4
BCE (NE-AE)	24	6.84	2.34	0.48

Difference = mu (BCE(NE-BE)) - mu (BCE(NE-AE))
Estimate for difference: -5.33
95percent CI for difference: (-10.54, -0.13)
T-Test of difference = 0 (vs not =): T-Value = -2.14 P-Value = 0.045 DF = 20

9. Two-sample T-Test and Confidence Intervals for all economies within the Eurosphere pre and post-euro. [ALL (E-BE) compared to ALL (E-AE) (groups q & r in key code)]

	N	Mean	StDev	SE Mean
ALL (E-BE)	158	2.41	2.06	0.16
ALL (E-AE)	94	1.45	1.30	0.13

Difference = mu (ALL (E-BE)) - mu (ALL(E-AE))
Estimate for difference: 0.955
95percent CI for difference: (0.538, 1.372)
T-Test of difference = 0 (vs not =): T-Value = 4.51 P-Value = 0.000 DF = 248

10. Two-sample T-Test and Confidence Intervals for all economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

	N	Mean	StDev	SE Mean
ALL (NE-BE)	95	2.43	5.45	0.56
ALL (NE-AE)	104	3.65	2.69	0.26

Difference = mu (ALL(NE-BE)) - mu (ALL(NE-AE))
Estimate for difference: -1.220
95percent CI for difference: (-2.442, 0.003)
T-Test of difference = 0 (vs not =): T-Value = -1.97 P-Value = 0.051 DF = 134

11. One-way ANOVA for all economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

Source	DF	SS	MS	F	P
Factor	1	73.9	73.9	4.11	0.044
Error	197	3536.5	18.0		
Total	198	3610.4			

S = 4.237 R-Sq = 2.05percent R-Sq(adj) = 1.55percent

Level	N	Mean	StDev
ALL (NE-BE)	95	2.427	5.449
ALL (NE-AE)	104	3.647	2.690

Individual 95percent CIs For Mean Based on Pooled StDev

```
Level        +---------+---------+---------+---------
ALL(NE-BE)   (---------*----------)
ALL(NE-AE)             (----------*---------)    .60      2.40      3.20      4.00
```

Pooled StDev = 4.23

12. Two-sample T-Test and Confidence Intervals for all economies pre and post-euro. [ALL (BE) compared to ALL (AE) (groups u & v in key code)]

	N	Mean	StDev	SE Mean
ALL (BE)	253	2.42	3.70	0.23
ALL (AE)	198	2.61	2.41	0.17

Difference = mu (ALL(BE)) - mu (ALL(AE))
Estimate for difference: -0.190
95percent CI for difference: (-0.758, 0.378)
T-Test of difference = 0 (vs not =): T-Value = -0.66 P-Value = 0.511 DF = 435

13. One-way ANOVA for all economies pre and post-euro. [ALL (BE) compared to ALL (AE) (groups u & v in key code)]

Source	DF	SS	MS	F	P
Factor	1	4.0	4.0	0.39	0.532
Error	449	4596.1	10.2		
Total	450	4600.1			

S = 3.199 R-Sq = 0.09percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---+---------+---------+---------+------
ALL (BE)	253	2.415	3.703	(----------*----------)
ALL (AE)	198	2.605	2.407	(----------*----------)
				---+---------+---------+---------+------
				2.10 2.40 2.70 3.00

Pooled StDev = 3.199

Appendix 4

Minitab statistical outputs for EU price stability through inflation (GDP deflator method) 1986-2006 (tests 1-11)

1. One-way ANOVA for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

```
Source   DF     SS     MS     F      P
Factor    1   200.5  200.5  18.59  0.000
Error   250  2695.7   10.8
Total   251  2896.2

S = 3.284   R-Sq = 6.92percent   R-Sq(adj) = 6.55percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level            N   Mean  StDev  --------+---------+---------+---------+-
ALL (E-BE)     156  4.288  4.021                    (------*-----)
ALL (E-AE)      96  2.451  1.414  (--------*-------)
                        --------+---------+---------+---------+-
                             2.40      3.20      4.00      4.80

Pooled StDev = 3.284
```

2. One-way ANOVA for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME (NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

```
Source  DF     SS     MS     F      P
Factor   1   31.41  31.41  7.60  0.009
Error   40  165.40   4.14
Total   41  196.81

S = 2.033   R-Sq = 15.96percent   R-Sq(adj) = 13.86percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level               N   Mean  StDev  ---+---------+---------+---------+------
CME (NE-BE)    26  3.481  2.514                 (-------*-------)
CME (NE-AE)    16  1.700  0.703  (---------*---------)
                        ---+---------+---------+---------+------
                         1.0       2.0       3.0       4.0

Pooled StDev = 2.033
```

3. One-way ANOVA for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

Source DF SS MS F P
Factor 1 1.09 1.09 0.31 0.581
Error 19 65.53 3.45
Total 20 66.61

S = 1.857 R-Sq = 1.63percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level N Mean StDev ---+---------+---------+---------+------
LME (E-BE) 13 3.269 2.043 (-------------*------------)
LME (E-AE) 8 3.738 1.486 (----------------*----------------)
---+---------+---------+---------+------
2.40 3.20 4.00 4.80

Pooled StDev = 1.857

4. One-way ANOVA for Liberal Market Economies outside the Eurosphere pre and post-euro. [LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code])

Source DF SS MS F P
Factor 1 21.36 21.36 7.56 0.013
Error 19 53.70 2.83
Total 20 75.07

S = 1.681 R-Sq = 28.46percent R-Sq(adj) = 24.69percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level N Mean StDev -+---------+---------+---------+--------
LME (NE-BE) 13 4.377 2.046 (-------*--------)
LME (NE-AE) 8 2.300 0.705 (---------*----------)
-+---------+---------+---------+--------
1.2 2.4 3.6 4.8

Pooled StDev = 1.681

5. One-way ANOVA for Southern European Economies within the Eurosphere pre and post-euro. [SEE (E-BE) compared to SEE (E-AE) (groups I & j in key code)]

Source DF SS MS F P
Factor 1 437.2 437.2 26.39 0.000
Error 61 1010.5 16.6
Total 62 1447.7

S = 4.070 R-Sq = 30.20percent R-Sq(adj) = 29.05percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---+---------+---------+---------+------
SEE (E-BE)	39	8.841	5.120	(----*-----)
SEE (E-AE)	24	3.417	0.792	(------*-----)

---+---------+---------+---------+------
2.5 5.0 7.5 ten.0

Pooled StDev = 4.070

6. One-way ANOVA for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

Source DF SS MS F P
Factor 1 3456.9 3456.9 49.14 0.000
Error 45 3165.4 70.3
Total 46 6622.4

S = 8.387 R-Sq = 52.20percent R-Sq(adj) = 51.14percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------+
FEB (NE-BE)	23	21.552	11.685	(----*----)
FEB (NE-AE)	24	4.396	2.652	(----*----)

---------+---------+---------+---------+
7.0 14.0 21.0 28.0

Pooled StDev = 8.387

7. One-way ANOVA for Small Island Economies outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

Source DF SS MS F P
Factor 1 0.69 0.69 0.35 0.558
Error 29 56.82 1.96
Total 30 57.51

S = 1.400 R-Sq = 1.20percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------
SIE (NE-BE)	15	3.073	1.738	(----------*----------)
SIE (NE-AE)	16	2.775	0.984	(----------*----------)

---------+---------+---------+---------+
2.50 3.00 3.50 4.00

Pooled StDev = 1.400

8. One-way ANOVA for Baltic Country Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

Source DF SS MS F P
Factor 1 212049 212049 5.98 0.019
Error 43 1525475 35476
Total 44 1737524

S = 188.4 R-Sq = 12.20percent R-Sq(adj) = ten.16percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------
BCE (NE-BE)	21	141.6	276.1	(----------*---------)
BCE (NE-AE)	24	4.0	3.7	(---------*--------)

---------+---------+---------+---------+
0 80 160 240

Pooled StDev = 188.4

9. Two-sample T-Test and Confidence Intervals for all economies within the Eurosphere pre and post-euro. [ALL (E-BE) compared to ALL (E-AE) (groups q & r in key code)]

	N	Mean	StDev	SE Mean
ALL (E-BE)	156	4.29	4.02	0.32
ALL (E-AE)	96	2.45	1.41	0.14

Difference = mu (ALL(E-BE)) - mu (ALL(E-AE))
Estimate for difference: 1.837
95percent CI for difference: (1.141, 2.532)
T-Test of difference = 0 (vs not =): T-Value = 5.21 P-Value = 0.000 DF = 209

10. Two-sample T-Test and Confidence Intervals for all economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

	N	Mean	StDev	SE Mean
ALL (NE-BE)	121	34	124	11
ALL (NE-AE)	117	3.72	2.67	0.25

Difference = mu (ALL (NE-BE)) - mu (ALL (NE-AE))
Estimate for difference: 30.6
95percent CI for difference: (8.4, 52.9)
T-Test of difference = 0 (vs not =): T-Value = 2.73 P-Value = 0.007 DF = 120

11. Two-sample T-Test and Confidence Intervals for all economies pre and post-euro. [ALL (BE) compared to ALL (AE) (groups u & v in key code])

	N	Mean	StDev	SE Mean
ALL (BE)	277	17.4	82.9	5.0
ALL (AE)	213	3.15	2.28	0.16

Difference = mu (ALL(BE)) - mu (ALL(AE))
Estimate for difference: 14.28
95percent CI for difference: (4.47, 24.09)
T-Test of difference = 0 (vs not =): T-Value = 2.87 P-Value = 0.004 DF = 27

Appendix 5

Minitab statistical outputs for EU price stability through inflation (HICP method) 1997-2006 (tests 1-7)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere for the period and Co-ordinated Market Economies outside the Eurosphere period [CME (E) compared to CME (NE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E)	80	1.872	0.829	0.093
CME (NE)	20	1.705	0.644	0.14

Difference = mu (CME(E)) - mu (CME(NE))
Estimate for difference: 0.167
95percent CI for difference: (-0.180, 0.515)
T-Test of difference = 0 (vs not =): T-Value = 0.98 P-Value = 0.334 DF = 36

2. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere for the period and Liberal Market Economies outside the Eurosphere period [LME (E) compared to LME (NE) (groups c & d in key code)]

	N	Mean	StDev	SE Mean
LME (E)	10	3.11	1.30	0.41
LME (NE)	10	1.510	0.448	0.14

Difference = mu (LME (E)) - mu (LME (NE))
Estimate for difference: 1.600
95percent CI for difference: (0.642, 2.558)
T-Test of difference = 0 (vs not =): T-Value = 3.68 P-Value = 0.004 DF = 11

3. One-way ANOVA for all groups over the period [CME (E), CME (NE), LME (E), LME (NE), SEE(E), SIE (NE), FEB (NE), and BCE (NE) (group i in key code)]

Source	DF	SS	MS	F	P
Factor	7	462.14	66.02	14.84	0.000
Error	222	987.67	4.45		
Total	229	1449.80			

S = 2.109 R-Sq = 31.88percent R-Sq(adj) = 29.73percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------
CME (E)	80	1.872	0.829	(-*--)
CME (NE)	20	1.705	0.644	(----*---)
LME (E)	10	3.110	1.301	(------*-----)
LME (NE)	10	1.510	0.448	(------*-----)
SIE (E)	20	2.710	0.886	(----*---)
SEE (E)	30	3.317	0.917	(---*--)
FEB (NE)	30	6.020	4.717	(---*---)
BCE (NE)	30	3.940	2.778	(---*--)

---------+---------+---------+---------+
2.0 4.0 6.0 8.0

Pooled StDev = 2.109

Grouping Information Using Tukey Method

	N	Mean	Grouping
FEB (NE)	30	6.020	A
BCE (NE)	30	3.940	B
SEE (E)	30	3.317	B C
LME (E)	10	3.110	B C D
SIE (E)	20	2.710	B C D
CME (E)	80	1.872	D
CME (NE)	20	1.705	C D
LME (NE)	10	1.510	C D

Means that do not share a letter are significantly different.

4. Two-sample T-Test and Confidence Intervals for Small Island Economies outside the Eurosphere for the period and Southern European Economies inside the Eurosphere for the period [SIE (NE) compared to SEE (E) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
SIE (E)	20	2.710	0.886	0.20
SEE (E)	30	3.317	0.917	0.17

Difference = mu (SIE (E)) - mu (SEE (E))
Estimate for difference: -0.607
95percent CI for difference: (-1.131, -0.083)
T-Test of difference = 0 (vs not =): T-Value = -2.34 P-Value = 0.024 DF = 41

5. Two-sample T-Test and Confidence Intervals for Former Eastern Bloc Economies outside the Eurosphere for the period and Baltic Country Economies outside the Eurosphere for the period [FEB (NE) compared to BCE (NE) (groups g & h in key code)]

	N	Mean	StDev	SE Mean
FEB (NE)	30	6.02	4.72	0.86
BCE (NE)	30	3.94	2.78	0.51

Difference = mu (FEB(NE)) - mu (BCE(NE))
Estimate for difference: 2.08
95percent CI for difference: (0.07, 4.09)
T-Test of difference = 0 (vs not =): T-Value = 2.08 P-Value = 0.043 DF = 46

6. One-way ANOVA for Co-ordinated Market Economies within the Eurosphere, Co-ordinated Market Economies outside the Eurosphere, and Liberal Market Economies within the Eurosphere [CME(E), CME(NE), and LME(E) over the period (groups a, b,& c in key code)]

Source DF SS MS F P
Factor 2 15.135 7.567 10.46 0.000
Error 107 77.418 0.724
Total 109 92.553

S = 0.8506 R-Sq = 16.35percent R-Sq(adj) = 14.79percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	--------+---------+---------+---------+-
CME (E)	80	1.8725	0.8292	(--*--)
CME (NE)	20	1.7050	0.6436	(-----*------)
LME (E)	103	1.100	1.3008	(--------*--------)

--------+---------+---------+---------+-
1.80 2.40 3.00 3.60

Pooled StDev = 0.8506

Grouping Information Using Tukey Method

	N	Mean	Grouping
LME (E)	10	3.1100	A
CME (E)	80	1.8725	B
CME (NE)	20	1.7050	B

Means that do not share a letter are significantly different.

7. One-way ANOVA for Co-ordinated Market Economies within the Eurosphere, Co-ordinated Market Economies outside the Eurosphere, and Liberal Market Economies within the Eurosphere [CME(E), CME(NE), and LME(E), over the period (groups a, b, & d in key code)]

Source DF SS MS F P
Factor 2 1.433 0.716 1.20 0.306
Error 107 63.998 0.598
Total 109 65.431

S = 0.7734 R-Sq = 2.19percent R-Sq(adj) = 0.36percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	------+---------+---------+---------+---
CME (E)	80	1.8725	0.8292	(----*-----)
CME (NE)	20	1.7050	0.6436	(-----------*----------)
LME (NE)	10	1.5ten0	0.4483	(---------------*---------------)

------+---------+---------+---------+---
1.20 1.50 1.80 2.10

Pooled StDev = 0.7734

Grouping Information Using Tukey Method

	N	Mean	Grouping
CME (E)	80	1.8725	A
CME (NE)	20	1.7050	A
LME (NE)	10	1.5ten0	A

Means that do not share a letter are significantly different.

Appendix 6

Minitab statistical outputs for EU unemployment 1986-2006 (tests 1-11)

1. One-way ANOVA for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

Source DF SS MS F P
Factor 1 4.4 4.4 0.43 0.512
Error 166 1685.0 ten.2
Total 167 1689.4

S = 3.186 R-Sq = 0.26percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	--------+---------+---------+---------+-
CME (E-BE)	104	7.220	3.474	(-----------*-----------)
CME (E-AE)	64	6.887	2.648	(---------------*--------------)
				--------+---------+---------+---------+-
				6.50 7.00 7.50 8.00

Pooled StDev = 3.186

2. One-way ANOVA for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME (NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

Source DF SS MS F P
Factor 1 5.52 5.52 1.11 0.298
Error 40 198.80 4.97
Total 41 204.32

S = 2.229 R-Sq = 2.70percent R-Sq(adj) = 0.27percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------+
CME (NE-BE)	26	6.165	2.709	(------------*------------)
CME (NE-AE)	16	5.419	1.009	(---------------*----------------)
				---------+---------+---------+---------+
				4.90 5.60 6.30 7.00

Pooled StDev = 2.22

3. One-way ANOVA for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

```
Source  DF     SS     MS     F     P
Factor   1  422.77  422.77  85.60  0.000
Error   19   93.84    4.94
Total   20  516.61

S = 2.222   R-Sq = 81.84percent   R-Sq(adj) = 80.88percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level            N    Mean  StDev  --+---------+---------+---------+-------
LME (E-BE)  13  13.777  2.769                          (--*---)
LME (E-AE)   8   4.537  0.515  (----*----)
                        --+---------+---------+---------+-------
                        3.5       7.0     10.5     14.0

Pooled StDev = 2.222
```

4. One-way ANOVA for Liberal Market Economies outside the Eurosphere pre and post-euro. [LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code)]

```
Source  DF     SS     MS     F     P
Factor   1  58.23  58.23  36.55  0.000
Error   19  30.27   1.59
Total   20  88.49

S = 1.262   R-Sq = 65.80percent   R-Sq(adj) = 64.00percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level            N    Mean  StDev  --+---------+---------+---------+-------
LME (NE-BE)  13  8.554  1.561                    (----*----)
LME (NE-AE)   8  5.125  0.381  (-----*-----)
                        --+---------+---------+---------+-------
                        4.5       6.0       7.5       9.0

Pooled StDev = 1.262
```

5. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro. [SEE (E-BE) compared to SEE (EE-AE) (groups I & j in key code)]

Two-sample T for SEE (E-BE) vs SEE (E-AE)

	N	Mean	StDev	SE Mean
SEE (E-BE)	41	ten.08	4.52	0.71
SEE (E-AE)	22	8.64	2.56	0.55

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: 1.437
95percent CI for difference: (-0.348, 3.222)
T-Test of difference = 0 (vs not =): T-Value = 1.61 P-Value = 0.113 DF = 6

6. One-way ANOVA for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

Source	DF	SS	MS	F	P
Factor	1	2.0	2.0	0.11	0.743
Error	40	723.1	18.1		
Total	41	725.0			

Pooled StDev = 4.252

S = 4.252 R-Sq = 0.27percent R-Sq(adj) = 0.00percent

Level	N	Mean	StDev	Individual 95percent CIs For Mean Based on Pooled StDev
FEB (NE-BE)	18	10.100	2.753	(----------*----------)
FEB (NE-AE)	24	10.538	5.083	(----------*----------)

8.4 9.6 10.8 12.0

7. One-way ANOVA for Small Island Economies outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

```
Source  DF    SS    MS    F     P
Factor   1   9.60  9.60  4.51  0.043
Error   26  55.38  2.13
Total   27  64.98

S = 1.459   R-Sq = 14.78percent   R-Sq(adj) = 11.50percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level             N   Mean  StDev  ------+---------+---------+---------+---
SIE (NE-BE)  12  4.642  1.246  (-----------*-----------)
SIE (NE-AE)  16  5.825  1.598                (---------*----------)
                        ------+---------+---------+---------+---
                          4.20      4.90      5.60      6.30

Pooled StDev = 1.459
```

8. One-way ANOVA for Baltic Country Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

```
Source  DF    SS    MS    F     P
Factor   1   56.0  56.0  2.84  0.099
Error   44  867.8  19.7
Total   45  923.8

S = 4.441   R-Sq = 6.07percent   R-Sq(adj) = 3.93percent

                        Individual 95percent CIs For Mean Based on
                        Pooled StDev
Level             N    Mean  StDev  ---+---------+---------+---------+------
BCE (NE-BE)  22   8.936  5.643  (------------*-----------)
BCE (NE-AE)  24  11.146  2.942             (-----------*-----------)
                        ---+---------+---------+---------+------
                         7.5       9.0     10.5      12.0
Pooled StDev = 4.44
```

9. Two-sample T-Test and Confidence Intervals for All Economies within the Eurosphere pre and post-euro. [ALL (E-BE) compared to ALL (EE-AE) (groups q & r in key code)]

	N	Mean	StDev	SE Mean
ALL (E-BE)	158	8.50	4.21	0.34
ALL (E-AE)	94	7.10	2.72	0.28

Difference = mu (ALL (E-BE)) - mu (ALL (E-AE))
Estimate for difference: 1.403
95percent CI for difference: (0.542, 2.265)
T-Test of difference = 0 (vs not =): T-Value = 3.21 P-Value = 0.002 DF = 248

10. Two-sample T-Test and Confidence Intervals for All Economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

	N	Mean	StDev	SE Mean
ALL (NE-BE)	91	7.75	3.87	0.41
ALL (NE-AE)	88	8.42	4.11	0.44

Difference = mu (ALL(NE-BE)) - mu (ALL(NE-AE))
Estimate for difference: -0.670
95percent CI for difference: (-1.849, 0.509)
T-Test of difference = 0 (vs not =): T-Value = -1.12 P-Value = 0.264 DF = 175

11. One-way ANOVA for all economies pre and post-euro.
[ALL (BE) compared to ALL (AE) (groups u & v in key code)]

Source	DF	SS	MS	F	P
Factor	1	25.2	25.2	1.68	0.195
Error	429	6408.6	14.9		
Total	430	6433.7			

S = 3.865 R-Sq = 0.39percent R-Sq(adj) = 0.16percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	-+---------+---------+---------+--------
ALL (BE)	249	8.228	4.099	(----------*----------)
ALL (AE)	182	7.739	3.519	(----------*----------)
				-+---------+---------+---------+--------
				7.20 7.60 8.00 8.40

Pooled StDev = 3.8

Appendix 7

Minitab statistical outputs for EU social benefits payments 1986-2006 (tests 1-11)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E-BE)	143	15.36	2.97	0.25
CME (E-AE)	94	14.90	3.11	0.32

Difference = mu (CME(E-BE)) - mu (CME (E-AE))
Estimate for difference: 0.456
95percent CI for difference: (-0.345, 1.256)
T-Test of difference = 0 (vs not =): T-Value = 1.12 P-Value = 0.263 DF = 192

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME(NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

	N	Mean	StDev	SE Mean
CME (NE-BE)	19	18.47	1.93	0.44
CME (NE-AE)	16	16.950	0.758	0.19

Difference = mu (CME(NE-BE)) - mu (CME(NE-AE))
Estimate for difference: 1.518
95percent CI for difference: (0.523, 2.514)
T-Test of difference = 0 (vs not =): T-Value = 3.15 P-Value = 0.004 DF = 24

3. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
LME (E-BE)	13	12.29	1.45	0.40
LME (E-AE)	8	8.738	0.447	0.16

Difference = mu (LME (E-BE)) - mu (LME (E-AE))
Estimate for difference: 3.555
95percent CI for difference: (2.633, 4.476)
T-Test of difference = 0 (vs not =): T-Value = 8.22 P-Value = 0.000 DF = 15

4. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere pre and post-euro. LME (NE-BE) compared to LME (NE-AE) [(groups g & h in key code)]

	N	Mean	StDev	SE Mean
LME (NE-BE)	13	13.86	1.40	0.39
LME (NE-AE)	8	12.762	0.106	0.038

Difference = mu (LME (NE-BE)) - mu (LME (NE-AE))
Estimate for difference: 1.099
95percent CI for difference: (0.251, 1.947)
T-Test of difference = 0 (vs not =): T-Value = 2.82 P-Value = 0.015 DF = 12

5.Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro, SEE(E-BE) compared to SEE(E-AE) (groups i&j in key code)

	N	Mean	StDev	SE Mean
SEE (E-BE)	28	11.86	1.98	0.37
SEE (E-AE)	24	13.50	1.83	0.37

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: -1.639
95percent CI for difference: (-2.699, -0.579)
T-Test of difference = 0 (vs not =): T-Value = -3.11 P-Value = 0.003 DF = 49

6. Two-sample T-Test and Confidence Intervals for Small Island Economies outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

	N	Mean	StDev	SE Mean
SIE (NE-BE)	5	11.50	1.65	0.74
SIE (NE-AE)	16	11.64	1.46	0.36

Difference = mu (SIE(NE-BE)) - mu (SIE(NE-AE))
Estimate for difference: -0.137
95percent CI for difference: (-2.152, 1.877)
T-Test of difference = 0 (vs not =): T-Value = -0.17 P-Value = 0.873 DF = 6

7. One-way ANOVA for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

Source	DF	SS	MS	F	P
Factor	1	22.99	22.99	4.08	0.050
Error	42	236.40	5.63		
Total	43	259.39			

S = 2.372 R-Sq = 8.86percent R-Sq(adj) = 6.69percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------+
FEB (NE-BE)	20	15.510	2.892	(----------*----------)
FEB (NE-AE)	24	14.058	1.835	(---------*--------)
				---------+---------+---------+---------+
				14.0 15.0 16.0 17.0

Pooled StDev = 2.372

8. One-way ANOVA for Baltic Country Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

Source DF SS MS F P
Factor 1 3.08 3.08 1.00 0.323
Error 41 126.06 3.07
Total 42 129.14

S = 1.753 R-Sq = 2.38percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---------+---------+---------+---------+
BCE (NE-BE)	19	10.326	2.022	(----------*----------)
BCE (NE-AE)	24	9.787	1.5ten	(----------*----------)

---------+---------+---------+---------+
9.60 10.20 10.80 11.40

Pooled StDev = 1.753

9 .One-way ANOVA for All Economies within the Eurosphere pre and post-euro. [ALL (E-BE) compared to ALL (E-AE) (groups q & r in key code)]

Source DF SS MS F P
Factor 1 8.97 8.97 0.99 0.322
Error 239 2174.04 9.10
Total 240 2183.01

S = 3.016 R-Sq = 0.41percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	---+---------+---------+---------+------
ALL (E-BE)	147	15.297	2.951	(----------*----------)
ALL (E-AE)	94	14.901	3.115	(----------*----------)

---+---------+---------+---------+------
14.40 14.80 15.20 15.60

Pooled StDev = 3.016

10. One-way ANOVA for All Economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE)] (groups s & t in key code)]

Source DF SS MS F P
Factor 1 81.62 81.62 8.26 0.005
Error 188 1857.54 9.88
Total 189 1939.16

S = 3.143 R-Sq = 4.21percent R-Sq(adj) = 3.70percent

Level N Mean StDev
ALL (NE-BE) 86 14.430 3.518
ALL (NE-AE) 104 13.113 2.797

Individual 95percent CIs For Mean Based on Pooled StDev
Level -+---------+---------+---------+--------
ALL (NE-BE) (--------*---------)
ALL (NE-AE) (-------*--------)
-+---------+---------+---------+--------
12.60 13.30 14.00 14.70

Pooled StDev = 3.143

11. One-way ANOVA for All Economies pre and post-euro. [ALL (BE) compared to ALL (AE) (groups u & v in key code)]

Source DF SS MS F P
Factor 1 8.97 8.97 0.99 0.322
Error 239 2174.04 9.ten
Total 240 2183.01

S = 3.016 R-Sq = 0.41percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on
Pooled StDev
Level N Mean StDev ---+---------+---------+---------+------
ALL (E-BE) 147 15.297 2.951 (-----------*------------)
ALL (E-AE) 94 14.901 3.115 (---------------*--------------)
---+---------+---------+---------+------
14.40 14.80 15.20 15.60

Pooled StDev = 3.016

Appendix 8

Minitab statistical outputs for direct government taxation 1986-2006 (tests 1-11)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere pre and post-euro. [CME (E-BE) compared to CME (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CME (E-BE)	100	13.39	2.87	0.29
CME (E-AE)	64	13.87	2.64	0.33

Difference = mu (CME(E-BE)) - mu (CME (E-AE))
Estimate for difference: -0.477
95percent CI for difference: (-1.343, 0.388)
T-Test of difference = 0 (vs not =): T-Value = -1.09 P-Value = 0.278 DF = 142

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere pre and post-euro. [CME (NE-BE) compared to CME (NE-AE) (groups c & d in key code)]

	N	Mean	StDev	SE Mean
CME (NE-BE)	19	26.70	4.44	1.0
CME (NE-AE)	16	24.98	5.23	1.3

Difference = mu (CME(NE-BE)) - mu (CME(NE-AE))
Estimate for difference: 1.72
95percent CI for difference: (-1.66, 5.11)
T-Test of difference = 0 (vs not =): T-Value = 1.04 P-Value = 0.306 DF = 29

3. Two-sample T-Test and Confidence Intervals for Liberal Market Economies within the Eurosphere pre and post-euro. [LME (E-BE) compared to LME (E-AE) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
LME (E-BE)	13	13.931	0.725	0.20
LME (E-AE)	8	12.575	0.746	0.26

Difference = mu (LME(E-BE)) - mu (LME(E-AE))
Estimate for difference: 1.356
95percent CI for difference: (0.644, 2.067)
T-Test of difference = 0 (vs not =): T-Value = 4.09 P-Value = 0.001 DF = 14

4. Two-sample T-Test and Confidence Intervals for Liberal Market Economies outside the Eurosphere pre and post-euro. LME (NE-BE) compared to LME (NE-AE) (groups g & h in key code)]

	N	Mean	StDev	SE Mean
LME (NE-BE)	13	15.369	0.783	0.22
LME (NE-AE)	8	15.950	0.717	0.25

Difference = mu (LME(NE-BE)) - mu (LME(NE-AE))
Estimate for difference: -0.581
95percent CI for difference: (-1.288, 0.127)
T-Test of difference = 0 (vs not =): T-Value = -1.74 P-Value = 0.ten1 DF = 16

5. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere pre and post-euro [SEE(E-BE) compared to SEE (EE-AE) (groups I & j in key code)]

	N	Mean	StDev	SE Mean
SEE (E-BE)	28	7.32	1.87	0.35
SEE (E-AE)	24	9.967	0.864	0.18

Difference = mu (SEE(E-BE)) - mu (SEE(E-AE))
Estimate for difference: -2.645
95percent CI for difference: (-3.443, -1.848)
T-Test of difference = 0 (vs not =): T-Value = -6.71 P-Value = 0.000 DF = 39

6. Two-sample T-Test and Confidence Intervals for Former Eastern Bloc Economies outside the Eurosphere pre and post-euro. [FEB (NE-BE) compared to FEB (NE-AE) (groups k & l in key code)]

	N	Mean	StDev	SE Mean
FEB (NE-BE)	30	9.76	1.89	0.35
FEB (NE-AE)	40	8.10	1.19	0.19

Difference = mu (FEB (NE-BE)) - mu (FEB (NE-AE))
Estimate for difference: 1.665
95percent CI for difference: (0.873, 2.457)
T-Test of difference = 0 (vs not =): T-Value = 4.23 P-Value = 0.000 DF = 45

7. Two-sample T-Test and Confidence Intervals for Small Island Economies outside the Eurosphere pre and post-euro. [SIE (NE-BE) compared to SIE (NE-AE) (groups m & n in key code)]

	N	Mean	StDev	SE Mean
SIE (NE-BE)	5	8.240	0.913	0.41
SIE (NE-AE)	16	10.46	1.19	0.30

Difference = mu (SIE(NE-BE)) - mu (SIE(NE-AE))
Estimate for difference: -2.223
95percent CI for difference: (-3.386, -1.059)
T-Test of difference = 0 (vs not =): T-Value = -4.40 P-Value = 0.002 DF = 8

8. Two-sample T-Test and Confidence Intervals for Baltic Island Economies outside the Eurosphere pre and post-euro. [BCE (NE-BE) compared to BCE (NE-AE) (groups o & p in key code)]

	N	Mean	StDev	SE Mean
BCE (NE-BE)	21	9.35	1.73	0.38
BCE (NE-AE)	24	8.050	0.767	0.16

Difference = mu (BCE (NE-BE)) - mu (BCE (NE-AE))
Estimate for difference: 1.302
95percent CI for difference: (0.463, 2.142)
T-Test of difference = 0 (vs not =): T-Value = 3.19 P-Value = 0.004 DF = 26

9.Two-sample T-Test and Confidence Intervals for All Economies within the Eurosphere pre and post-euro, ALL(E-BE) compared to ALL (E-AE) (groups q & r in key code)

	N	Mean	StDev	SE Mean
ALL (E-BE)	141	12.24	3.55	0.30
ALL (E-AE)	96	12.79	2.77	0.28

Difference = mu (ALL(E-BE)) - mu (ALL(E-AE))
Estimate for difference: -0.550
95percent CI for difference: (-1.360, 0.261)
T-Test of difference = 0 (vs not =): T-Value = -1.34 P-Value = 0.183 DF = 230

10. Two-sample T-Test and Confidence Intervals for All Economies outside the Eurosphere pre and post-euro. [ALL (NE-BE) compared to ALL (NE-AE) (groups s & t in key code)]

	N	Mean	StDev	SE Mean
ALL (NE-BE)	88	14.06	7.41	0.79
ALL (NE-AE)	82	12.08	7.22	0.80

Difference = mu (ALL (NE-BE)) - mu (ALL (NE-AE))
Estimate for difference: 1.99
95percent CI for difference: (-0.23, 4.20)
T-Test of difference = 0 (vs not =): T-Value = 1.77 P-Value = 0.079 DF = 167

11. One-way ANOVA of all economies pre and post-euro [ALL (BE) compared to ALL (AE) (groups u & v in key code)]

Source	DF	SS	MS	F	P
Factor	1	23.0	23.0	0.79	0.373
Error	405	11700.5	28.9		
Total	406	11723.5			

S = 5.375 R-Sq = 0.20percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	-------+---------+---------+---------+--
ALL (BE)	229	12.938	5.430	(----------*----------)
ALL (AE)	178	12.460	5.304	(----------*----------)
				-------+---------+---------+---------+--
				12.00 12.50 13.00 13.50

Pooled StDev = 5.375

Appendix 9

Minitab statistical outputs for EU trade openness 1986-2006 (tests 1-16)

1. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere intra-EU trade openness pre and post-euro. [CMEIEO (E-BE) compared to CMEIEO (E-AE) (groups a & b in key code)]

	N	Mean	StDev	SE Mean
CMEIEO (E-BE)	7	40.3	24.0	9.1
CMEIEO (E-AE)	7	55.1	32.7	12

Difference = mu (CMEIEO(E-BE)) - mu (CMEIEO(E-AE))
Estimate for difference: -14.8
95percent CI for difference: (-48.6, 19.0)
T-Test of difference = 0 (vs not =): T-Value = -0.96 P-Value = 0.356 DF = 11

2. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere intra-EU trade openness pre and post-euro [CMEIEO (NE-BE) compared to CMEIEO (NE-AE) (groups e & f in key code)]

	N	Mean	StDev	SE Mean
CMEIEO (NE-BE)	2	32.87	2.08	1.5
CMEIEO (NE-AE)	2	42.24	1.10	0.78

Difference = mu (CMEIEO (NE-BE)) - mu (CMEIEO (NE-AE))
Estimate for difference: -9.38
95percent CI for difference: (-30.57, 11.81)
T-Test of difference = 0 (vs not =): T-Value = -5.62 P-Value = 0.112 DF = 1

3. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere intra-EU trade openness pre and post-euro. [SEEIEO (EE-BE) compared to SEEIEO (E-AE) (groups q & r in key code)]

	N	Mean	StDev	SE Mean
SEEIEO (E-BE)	3	25.7	10.4	6.0
SEEIEO (E-AE)	3	30.3	11.6	6.7

Difference = mu (SEEIEO (E-BE)) - mu (SEEIEO (E-AE))
Estimate for difference: -4.54
95percent CI for difference: (-33.17, 24.09)
T-Test of difference = 0 (vs not =): T-Value = -0.50 P-Value = 0.649 DF = 3

4. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies within the Eurosphere extra-EU trade openness pre and post-. [CMEEEO (E-BE) compared to CMEEEO (E-AE) (groups c & d in key code)]

	N	Mean	StDev	SE Mean
CMEEEO (E-BE)	7	18.50	5.54	2.1
CMEEEO (E-AE)	7	27.9	11.4	4.3

Difference = mu (CMEEEO(E-BE)) - mu (CMEEEO(E-AE))
Estimate for difference: -9.44
95percent CI for difference: (-20.45, 1.58)
T-Test of difference = 0 (vs not =): T-Value = -1.98 P-Value = 0.084 DF = 8

5. Two-sample T-Test and Confidence Intervals for Co-ordinated Market Economies outside the Eurosphere extra-EU trade openness pre and post-euro. [CMEEEO (NE-BE) compared to CMEEEO (NE-AE) (groups g & h in key code)]

	N	Mean	StDev	SE Mean
CMEEEO (NE-BE)	2	25.30	2.11	1.5
CMEEEO (NE-AE)	2	35.67	5.16	3.7

Difference = mu (CMEEEO (NE-BE)) - mu (CMEEEO (NE-AE))
Estimate for difference: -ten.37
95percent CI for difference: (-60.48, 39.73)
T-Test of difference = 0 (vs not =): T-Value = -2.63 P-Value = 0.231 DF = 1

6. Two-sample T-Test and Confidence Intervals for Southern European Economies within the Eurosphere extra-EU trade openness pre and post-euro [SEEEEO (E-BE) compared to SEEEEO (E-AE) (groups s & t in key code)]

	N	Mean	StDev	SE Mean
SEEEEO (E-BE)	3	11.17	1.23	0.71
SEEEEO (E-AE)	3	13.550	0.917	0.53

Difference = mu (SEEEEO (E-BE)) - mu (SEEEEO (E-AE))
Estimate for difference: -2.383
95percent CI for difference: (-5.200, 0.434)
T-Test of difference = 0 (vs not =): T-Value = -2.69 P-Value = 0.074 DF = 3

7. One-way ANOVA for all qualifying economies intra-EU trade openness pre-euro comparing CMEIEO (E-BE); CMEIEO (NE-BE; LMEIEO (E-BE); LMEIEO (NE-BE); and SEEIEO (E-BE) (groups a, e, i, m, & q in key code)

Source	DF	SS	MS	F	P
Factor	4	1915	479	1.17	0.387
Error	9	3691	410		
Total	13	5606			

Pooled StDev = 20.25

S = 20.25 R-Sq = 34.17percent R-Sq(adj) = 4.91percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	------+---------+---------+---------+---
CMEIEO (E-BE)	7	40.34	24.04	(---*---)
CMEIEO (NE-BE)	2	32.87	2.08	(-------*-------)
LMEIEO (E-BE)	1	72.06	*	(----------*----------)
LMEIEO (NE-BE)	1	23.08	*	(----------*----------)
SEEIEO (E-BE)	3	25.74	10.44	(-----*------)

------+---------+---------+---------+---
0 40 80 120

8. One-way ANOVA for all qualifying economies intra-EU trade openness post-euro comparing CMEIEO (E-AE); CMEIEO (NE-AE; LMEIEO (E-AE); LMEIEO (NE-AE); and SEEIEO (E-AE) (groups b, f, j, n, & r in key code)

Source DF SS MS F P
Factor 4 2381 595 0.80 0.555
Error 9 6698 744
Total 13 9079

S = 27.28 R-Sq = 26.23percent R-Sq(adj) = 0.00percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	--------+---------+---------+---------+-
CMEIEO (E-AE)	7	55.13	32.73	(----*----)
CMEIEO (NE-AE)	2	42.24	1.10	(-------*--------)
LMEIEO (E-AE)	1	69.03	*	(------------*-----------)
LMEIEO (NE-AE)	1	23.52	*	(------------*-----------)
SEEIEO (E-AE)	3	30.28	11.57	(------*------)

Pooled StDev = 27.28

9. One-way ANOVA for all qualifying economies extra-EU trade openness pre-euro comparing CMEEEO (E-BE); CMEEEO (NE-BE; LMEEEO (E-BE); LMEEEO (NE-BE); and SEEEEO (E-BE) (groups c, g, k, o, & s in key code)

Source DF SS MS F P
Factor 4 928.3 232.1 10.91 0.002
Error 9 191.4 21.3
Total 13 1119.6

S = 4.611 R-Sq = 82.91percent R-Sq(adj) = 75.31percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	-------+---------+---------+---------+--
CMEEEO (E-BE)	7	18.502	5.536	(-*--)
CMEEEO (NE-BE)	2	25.300	2.1ten	(----*----)
LMEEEO (E-BE)	1	44.892	*	(------*------)
LMEEEO (NE-BE)	1	18.138	*	(------*------)
SEEEEO (E-BE)	3	11.167	1.229	(---*---)

-------+---------+---------+---------+-- Pooled StDev = 4.611

15 30 45

10. One-way ANOVA for all qualifying economies extra-EU trade openness post-euro comparing CMEEEO (E-AE); CMEEEO (NE-AE; LMEEEO (E-AE); LMEEEO (NE-AE); and SEEEEO (E-AE) (groups d, h, l, p, & t in key code)

Source	DF	SS	MS	F	P
Factor	4	1561.4	390.3	4.38	0.031
Error	9	802.3	89.1		
Total	13	2363.7			

S = 9.442 R-Sq = 66.06percent R-Sq(adj) = 50.97percent

Individual 95percent CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev	-+---------+---------+---------+--------
CMEEEO (E-AE)	7	27.938	11.358	(---*---)
CMEEEO (NE-AE)	2	35.675	5.162	(-------*------)
LMEEEO (E-AE)	1	55.425	*	(----------*---------)
LMEEEO (NE-AE)	1	19.550	*	(----------*---------)
SEEEEO (E-AE)	3	13.550	0.917	(-----*-----)

-+---------+---------+---------+--------
0 20 40 60

Pooled StDev = 9.442

11. Two-sample T-Test and Confidence Intervals for all qualifying economies within the Eurosphere intra-EU trade pre and post-euro comparing ALLEIEO (BE) with ALLEIEO (AE) (groups u & v in key code)

	N	Mean	StDev	SE Mean
ALLEIEO (BE)	11	39.2	23.1	7.0
ALLEIEO (AE)	11	49.6	29.0	8.7

Difference = mu (ALLEIEO(BE)) - mu (ALLEIEO(AE))
Estimate for difference: -10.4
95percent CI for difference: (-33.7, 13.0)
T-Test of difference = 0 (vs not =): T-Value = -0.93 P-Value = 0.365 DF = 19

12.Two-sample T-Test and Confidence Intervals for all qualifying economies outside the Eurosphere intra-EU trade openness pre and post-euro, comparing ALLNEIEO(BE) with ALLNEIEO (AE) (groups y &z in key code)

	N	Mean	StDev	SE Mean
ALLNEIEO (BE)	2	32.87	2.08	1.5
ALLNEIEO (AE)	2	42.24	1.10	0.78

Difference = mu (ALLNEIEO(BE)) - mu (ALLNEIEO(AE))
Estimate for difference: -9.38
95percent CI for difference: (-30.57, 11.81)
T-Test of difference = 0 (vs not =): T-Value = -5.62 P-Value = 0.112 DF = 1

13. Two-sample T-Test and Confidence Intervals for all qualifying economies within the Eurosphere extra-EU trade openness pre and post-euro comparing ALLEEEO (BE) with ALLEEEO (AE) (groups w & x in key code)

	N	Mean	StDev	SE Mean
ALLEEEO (BE)	11	18.9	10.2	3.1
ALLEEEO (AE)	11	26.5	14.6	4.4

Difference = mu (ALLEEEO(BE)) - mu (ALLEEEO(AE))
Estimate for difference: -7.61
95percent CI for difference: (-18.94, 3.72)
T-Test of difference = 0 (vs not =): T-Value = -1.42 P-Value = 0.174 DF = 17

14. Two-sample T-Test and Confidence Intervals for all qualifying economies outside the Eurosphere extra-EU trade openness pre and post-euro comparing ALLNEEEO (BE) with ALLNEEEO (AE) (groups aa & bb in key code)

	N	Mean	StDev	SE Mean
ALLNEIEO (BE)	2	32.87	2.08	1.5
ALLNEIEO (AE)	2	42.24	1.10	0.78

Difference = mu (ALLNEIEO (BE)) - mu (ALLNEIEO (AE))
Estimate for difference: -9.38
95percent CI for difference: (-30.57, 11.81)
T-Test of difference = 0 (vs not =): T-Value = -5.62 P-Value = 0.112 DF = 1

15. Two-sample T-Test and Confidence Intervals for all qualifying economies intra-EU trade openness pre and post-euro, comparing ALLIEO(BE) with ALLIEO(AE) (groups cc & dd in key code)

	N	Mean	StDev	SE Mean
ALLNEEEO (BE)	3	29.8	10.8	6.2
ALLNEEEO (AE)	3	30.32	9.97	5.8

Difference = mu (ALLNEEEO (BE)) - mu (ALLNEEEO (AE))
Estimate for difference: -0.49
95percent CI for difference: (-27.45, 26.47)
T-Test of difference = 0 (vs not =): T-Value = -0.06 P-Value = 0.958 DF = 3

16. Two-sample T-Test and Confidence Intervals for all qualifying economies extra-EU trade openness pre and post-euro, comparing ALLEEO (BE) with ALLEEO (AE) (groups ee & ff in key code)

Two-sample T for ALLIEO (BE) vs ALLIEO (AE)

	N	Mean	StDev	SE Mean
ALLIEO (BE)	14	37.2	20.7	5.5
ALLIEO (AE)	14	46.7	26.4	7.1

Difference = mu (ALLIEO (BE)) - mu (ALLIEO (AE))
Estimate for difference: -9.49
95percent CI for difference: (-28.02, 9.05)
T-Test of difference = 0 (vs not =): T-Value = -1.06 P-Value = 0.301 DF = 24

Appendix 10

Eurosphere consumer prices compared to Denmark, Japan, Sweden, the United Kingdom, and the United States 2001-2006

Selected individual Eurosphere countries

	2001	2002	2003	2004	2005	2006	Mean
Austria	2.0	1.7	1.3	2.6	2.0	1.8	**1.9**
Belgium	2.1	1.1	1.9	2.5	2.6	1.6	**2.0**
France	1.2	2.2	2.3	2.1	1.6	1.9	**1.9**
Germany	1.7	1.1	1.3	1.8	2.3	1.7	**1.7**
Italy	2.4	2.8	2.5	2.0	2.2	2.2	**2.4**
Netherlands	4.2	3.2	2.0	1.4	1.8	1.4	**2.3**
Spain	2.7	3.9	2.8	3.6	3.5	3.7	**3.4**
Mean	**2.3**	**2.3**	**2.0**	**2.3**	**2.3**	**2.0**	**2.2**